THE HEALTH of NORTHAMPTONSHIRE in 1964

PART I

Report of the County Medical Officer of Health

M. O. H. Ann. Rpt. Northants 1964 pt II
H. M. Medley CL22

THE HEALTH VISITOR—CONSULTATION AT WELLINGBOROUGH

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County Medical
Officer of Health

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NORTHAMPTONSHIRE COUNTY COUNCIL.

October, 1965

To the Chairman and Members of the Northamptonshire County Council.

Mr. Chairman, My Lords, Ladies and Gentlemen,

I have the honour to present my third Annual Report, which is the sixty-eighth such report of the County Medical Officer of Health.

Health of the county

By the middle of the year the population of Northamptonshire had reached 310,840, this being an increase of 5,100 over the corresponding figure for 1963. Some impression of the growth of the county can be obtained from the fact that, in 1954, the population was 265,200 while, in 1944, it was only 233,340. The past twenty years have thus involved an increase of 77,540, or almost 33%, in the population. The birth rate for the county continued to be above the national average, and the loss of infant life, both by stillbirth and by death under the age of one year, was again below the average level for England and Wales. On turning to deaths, the customary pattern of recent years was maintained, with diseases of the heart and arteries accounting for more than half the total, followed by malignant disease (almost 19%), and bronchitis and pneumonia (almost 9%).

Cigarette smoking

Reference was made in my two previous annual reports to unnecessary deaths caused by cigarette smoking, and no apologies are offered for returning to the subject this year for, to take only one index of the hazard, there were 130 deaths from lung cancer in Northamptonshire during 1964. This unpleasant and largely preventable disease has, in fact, during the past ten years, killed 971 men and 128 women in the county, making a total of 1,099 deaths over the decade.

Early in 1965 the Minister of Health announced the Government's intention of banning the advertising of cigarettes on television, of arranging to increase the display of anti-smoking posters at railway premises and in buses, and of providing for the exhibition of short anti-smoking films on television. The advertising ban has led to vociferous protests from such financially interested parties as the tobacco and advertising industries. Amongst their many claims has been one to the effect that it is illogical to ban television advertisements, whilst leaving other forms of tobacco advertising untouched, and I can only agree about this illogicality and look forward to the day when the Government may feel able to ban all forms of cigarette advertising. Representatives of the advertising industry have also, rather naively, claimed that cigarette advertising in general, and television advertisements in particular, are designed to stimulate brand competition rather than to encourage people to smoke. This is palpably false, as such advertisements seek to prove, in the first place, that cigarette smoking is a pleasant and desirable practice, and only in the second place, that brand "X" is particularly pleasant and especially desirable. It would, of course, clearly be fatuous to permit the advertising of cigarettes on television alongside the Government's own anti-smoking films.

Considerable play is also being made of the enormous sum of money which is gathered each year in taxation from the sale of tobacco, and the fact that this sum is equivalent to most of the cost of the National Health Service is used as the basis for the statement that the expenditure on the latter is largely borne by means of the former. This leads on to the argument that, if cigarette smoking were abolished, the Government would have to find a vast alternative source of taxation. Such an argument is weak, because it does not take into account the fact that some of the money in question represents tax returns from the relatively innocuous pipe tobacco and cigars, the sales of which would no doubt increase ; it likewise makes no allowance for the loss to the United Kingdom of some 28,000 people who die each year from smoker's cancer of the lung ; or of deaths from bronchitis, coronary artery thrombosis, and other diseases which have a close association with smoking habits. The cessation of cigarette smoking would, in all probability, eventually save this country up to 50,000 lives a year, with a consequent direct gain to the national economy, as well as huge savings in the costs of hospital treatment, and in sickness, widows' and children's benefits, payable as the result of illness and death brought about by cigarette smoking.

Another fashionable argument is to the effect that banning cigarette advertising is merely the first step towards wider restrictions, this argument usually being coupled with the suggestion that certain foodstuffs are even more frequent causes of death. It is true that over-nutrition may lead to reduced life expectancy, and it has been suggested that certain forms of fat and, more recently, that sugar, may play sinister roles. It should, however, be emphasised that these last two suppositions are still far from clearly established, and that the relationship between certain dietary constituents and death from cardiovascular disease bears no comparison with the direct relationship which exists between the number of cigarettes smoked and deaths from lung cancer, bronchitis and coronary disease.

At all events, the medical profession in general, and those engaged in the practice of public health in particular, welcome the Government's recent action in taking a direct step towards helping to deal with what constitutes one of the main health problems of to-day. The relationship between cigarette smoking and various diseases is internationally recognised and, in this country, there is evidence that substantial numbers of the medical profession have heeded the scientific data and changed their smoking habits. In consequence, during the decade 1952-61, when deaths from lung cancer in men over the age of 25 increased by 22%, the corresponding deaths amongst doctors decreased by 7%. It is now the medical profession's task, working in conjunction with others, to persuade the generality of the population to take similar steps towards protecting their own lives. The task is a daunting one, but progress is being made and, in recent years, it has been interesting to observe that certain cigarette manufacturing companies are expanding their trading interests in products which have nothing to do with smoking. This is tactfully referred to as " diversification " ; it might alternatively be described as a growing ability to discern the writing on the wall.

Health education

The key to the major health problems of to-day lies in persuading members of the public that they must take positive steps to protect their own health, and all members of the staff of the County Health Department have their roles to play in trying to teach people how to do this. Such work has always been a particularly important aspect of health visiting and will remain so, but there is also need for local health authorities to have sections with staff specially trained to further the cause of health education. During the year, a committee, under the Chairmanship of Lord Cohen of Birkenhead, produced its report on the future development of health education in this country, and reference to this will be found in the chapter on the subject (page 37). Organised health teaching has now been practised in Northamptonshire for some four years,

and the demand for such services is outstripping the supply, in consequence of which the Health Committee is planning to appoint an Assistant Health Education Organiser and a second visual aids assistant in the course of 1965.

A particularly notable event in the field of health education was the highly successful Home Safety Competition run amongst the Women's Institutes of the county. This aroused great interest and permitted the County Health Department staff to put their message before a large and important section of the community. There was also a substantial increase in the amount of health teaching in schools ; and the early part of the year saw the final stages of the Northamptonshire Mental Health Project.

Staffing

Amongst local health authorities, there is a national shortage of almost all kinds of professional staff, but the position in Northamptonshire remained relatively satisfactory and, indeed, there was a continued improvement in the dental staffing situation. The supply of health visitors was good and the service was almost fully staffed during the major part of the year, thus enabling plans to be made for the county's first scheme for the attachment of health visitors to general practices to come into operation from 1st January 1965. The domiciliary nursing and midwifery services maintained their satisfactory states, and there seems little doubt that the steady movement towards a five-day working week has had a beneficial effect both on the recruitment and on the retention of staff.

It is unfortunately necessary to report that the year was again marred by deaths. Dr. P. X. Bermingham, who had been a district medical officer since 1949, died in December, after a long and distressing illness. During his years in the county he had served both his district councils and the County Council loyally and well, and his work was typified by conscientiousness and diligence. In addition, Dr. Bermingham had a particularly pleasant personality, which made him popular alike with colleagues, with councillors, and with members of the public. His premature death brought sadness, not merely to his family, but also to a wide range of people throughout the county.

The health visiting service suffered a sad loss through the death, at the age of 39, of Miss Merle Naysmith, a New Zealander who was granted a health visitor scholarship by Northamptonshire in 1961, and who subsequently established herself as a valuable member of staff in the New Duston area. Her sudden death came as a blow to her colleagues and to the mothers and children amongst whom she worked. The third death was that of Miss M. J. Cook, district nurse/midwife in the Middleton Cheney area. She had been in the county for only nine months before meeting her death, at the age of 41, in a car accident. During her short service, it became clear that Miss Cook had settled into what should have been a very successful career.

The future of public health

This introductory letter is intended to do no more than touch upon a small number of topics which are covered more fully elsewhere in my report and I hope that readers will find many subjects to interest them as they study the pages which follow. For those who do not feel disposed to read the report in its entirety, a detailed index at the back should facilitate selective study.

As I have already pointed out, Northamptonshire is a county which is expanding rapidly, and its health services must be augmented to meet these growing needs. They must also be adjusted to ensure that they remain relevant to the requirements both of to-day and of to-morrow because, in all sociomedical services, there is a danger that traditional patterns will be perpetuated purely because this is the easiest and least controversial thing to do. Nationally,

much attention is being given to the role of public health in the tripartite British National Health Service and, as this is a subject which may well be of interest to readers of this report, an appendix (page 79) has been included, consisting of a reprint of an article on the subject which appeared towards the end of the year in the *British Medical Journal*, and which is reproduced by kind permission of the Editor.

Acknowledgements

The year under review has seen the consolidation of new policies and the further development of the county's health services in accordance with the ten-year plan. It is a pleasure to acknowledge the help which I have received from all members of the professional, administrative and clerical staff, and I am likewise grateful to the chairmen and members of the committees which I serve, for the continuing development of the health services of Northamptonshire has been the result of team work.

I have the honour to be,

Your obedient servant,
J. J. A. REID,
County Medical Officer of Health.

STAFF

County Medical Officer of Health and Principal School Medical Officer :

J. J. A. Reid, T.D., M.D., ChB., B.Sc., D.P.H.

Deputy County Medical Officer of Health and Deputy Principal School Medical Officer :

A. Gatherer, M.D., Ch.B., D.P.H., D.I.H.

Senior Medical Officer :

W. J. McQuillan, M.B., B.Ch., L.M., D.P.H., D.C.H.

Assistant Medical Officers :

Mrs. M. H. Ballantyne, M.B., Ch.B. (*part-time*).
P. X. Bermingham, M.B., B.Ch., D.P.H. (*also District Medical Officer of Health*) (*died 29th December*).
Mrs. M. V. Capon, M.B., B.S.
Mrs. C. Collins, M.B., B.Ch., D.P.H., D.C.H. (*part-time*).
Mrs. J. M. St. V. Dawkins, M.B., B.S., D.P.H., D.C.H. (*also District Medical Officer of Health*).
Mrs. G. Duncan, M.B., Ch.B. (*part-time*) (*from 10th July*).
Mrs. L. M. Egdell, M.B., Ch.B. (*part-time*) (*to 14th July*).
J. V. L. Farquhar, M.A., M.R.C.S., L.R.C.P., D.P.H. (*also District Medical Officer of Health*).
Miss M. C. Goodchild, M.R.C.S., L.R.C.P., D.C.H.
W. R. Howell, L.M.S.S.A., D.P.H.
A. Lucas, L.R.C.P., L.R.C.S., L.R.F.P.S., D.P.H. (*also District Medical Officer of Health*).
F. R. N. Lynch, M.B., B.Ch., D.P.H. (*also District Medical Officer of Health*).
J. C. MacInnes, M.B., Ch.B., D.P.H. (*from 1st August*).
R. F. McKnight, M.A., M.R.C.S., L.R.C.P., D.P.H., D.T.M.&H. (*from 6th July*).
Mrs. M. Reid, M.B., Ch.B. (*part-time*).
Mrs. M. W. Scott Clarke, M.B., Ch.B., D.P.H. (*part-time*).
Mrs. M. B. Smith, M.B., Ch.B., D.P.H. (*part-time*).
Mrs. E. A. Ward, M.B., B.S. (*part-time*).
Mrs. V. L. White, M.B., Ch.B. (*part-time*) (*from 22nd October*).
Mrs. J. F. Woolfendon, M.B., Ch.B. (*part-time*) (*from 1st October*).

Chief Dental Officer :

P. W. Gibson, L.D.S.

Dental Officers :

J. Aaron, M.B., B.S., L.D.S. (*part-time*) (*to 9th July*).
Mrs. F. Campbell, L.D.S. (*part-time*).
R. J. H. Corfe, L.D.S.
M. E. Eagland, B.Ch.D., L.D.S. (*part-time*) (*to 30th November*).
D. R. Hannah, B.D.S.
R. D. R. Hopkinson, L.D.S.
J. R. Humphreys, B.D.S. (*from 5th October*).
Mrs. M. H. Humphreys, B.D.S. (*from 26th October*).
Mrs. F. M. Jones, L.D.S.
J. M. Lacey, L.D.S. (*from 3rd February*).
C. M. Perry, L.D.S.

Dental Auxiliaries :

Mrs. C. Jackson (*from 1st September*).
Miss D. M. Marshall.

Superintendent Nursing Officer :

Miss N. Taylorson, S.R.N., S.C.M., M.T.D., H.V.Cert., Q.N.

Deputy Superintendent Nursing Officer :

Miss L. Bogle, S.R.N., S.C.M., H.V.Cert., Q.N.

Assistant Superintendent Nursing Officers :

Miss F. I. Taylor, S.R.N., S.C.M., H.V.Cert., Dip. Soc. Sc., Q.N.
Miss M. Twemlow, S.R.N., S.C.M., Q.N. (*from 6th January*).

Superintendent Health Visitor :

Miss S. H. Buchanan, S.R.N., S.C.M., H.V.Cert.

Assistant Superintendent Health Visitor :

Miss M. M. Wright, S.R.N., S.C.M., H.V.Cert. (*from 11th May*).

Health Education Organiser :

Miss J. A. Forester, S.R.N., S.C.M., D.H.Ed., H.V.Cert., P.H. Tutor's Cert., Q.N.

Chief Clerk :

R. J. Bruce.

County Ambulance Officer :

P. H. J. Wilkinson.

Deputy County Ambulance Officer :

W. C. Collett.

Senior Psychiatric Social Worker :

J. A. Ingram, B.Sc., A.A.P.S.W. (*from 1st July*).

Senior Mental Welfare Officer :

E. Towning, R.M.P.A.†

Mental Welfare Officers :

Miss E. M. Bliss, S.R.N.
S. A. Crouch.†
J. L. Edwards (*from 1st April*).
J. T. W. Forward, S.R.N., R.M.N. (*from 1st April*).
K. Greenwood, S.R.N., R.M.N., Dip. Social Studies.
R. Harris, S.R.N., R.M.N. (*from 1st January*).
B. F. Norman, Dip. Social Studies.
Mrs. A. Pebody, M.A., Dip. Soc. Sc. (*to 31st May*).
Mrs. J. Woodford, M.A.O.T.

† *Awarded declaration of recognition of experience by Council for Training in Social Work.*

Mental Welfare Officers/Craft Instructors (Occupational Therapists) :

Mrs. A. M. Jobbins, M.A.O.T.
Mrs. K. Kench, M.A.O.T.

Welfare Assistant :

N. J. Locke.

Training Centre Supervisors :

Corby—Mrs. E. Cocker*
Henley Industrial Unit, Kettering—Miss F. L. Caswell*
W. Lewis* (*to 4th May*).
D. A. Beale* (*from 1st September*).
Henley School, Kettering—Miss H. E. Griffin*
Northampton—Mrs. M. B. Redley*
Wellingborough—Miss B. V. Miller*

* *Diploma for teachers of the Mentally Handicapped.*

Henley Hostel :

N. L. Laffan, R.M.N. (*Warden*).
Mrs. M. Laffan (*Matron*).

Senior Speech Therapist :

Mrs. M. G. Cunningham, L.C.S.T.

Speech Therapists :

Miss S. A. R. Bruce, L.C.S.T.
Mrs. L. Cooper, L.C.S.T. (*from 1st September*).
Miss J. A. French, L.C.S.T. (*to 18th April*).
Miss J. Mackenzie, L.C.S.T. (*from 1st September*).
Mrs. G. Wilson, L.C.S.T. (*part-time*).

Home Help Organiser :

Miss E. Newell.

Assistant Home Help Organisers :

Miss S. Collier.
Mrs. M. Hager.
Mrs. G. M. Kidds (*from 7th December*).
Mrs. P. Sharman (*from 20th May*).

VITAL STATISTICS

Area of the Administrative County	578,947 acres
Population (Census 1961)	292,584
,, 1964, mid-year estimate	310,840
Structurally separate dwellings occupied (Census 1961)	96,552
Private households (Census 1961)	93,649
Rateable value (April 1st, 1964)	£10,809,005
Actual product of a penny rate (1963-64)	£43,252

	Northamptonshire			England & Wales
	Male	*Female*	*Total*	
Live births	3,105	2,832	5,937	
Live birth rate per 1,000 population			19.10	18.4
Illegitimate live births per cent of total live births			5.29	
Stillbirths	40	41	81	
Stillbirth rate per 1,000 live and stillbirths			13.46	16.3
Total live and stillbirths	3,145	2,873	6,018	
Infant deaths	53	56	109	
Infant mortality rate :				
Total (per 1,000 live births)			18.36	20.0
Legitimate (per 1,000 legitimate live births)			18.50	
Illegitimate (per 1,000 illegitimate live births)			15.92	
Neonatal (first four weeks) mortality rate per 1,000 live births			12.97	13.8
Early neonatal (under 1 week) mortality rate per 1,000 live births			11.79	
Perinatal (stillbirths and deaths under 1 week combined) mortality rate per 1,000 live and stillbirths			25.09	
Maternal deaths (including abortion)			1	
Maternal mortality rate per 1,000 live and stillbirths			0.17	0.25

1. Population. The Registrar General estimated the resident mid-year population for 1964 to have been 310,840 compared with 305,740 in 1963, representing an increase of 5,100. The estimated populations for the urban and rural areas were 171,670 and 139,170 respectively. The natural increase in population, i.e. the excess of births over deaths, totalled 2,655.

2. Deaths. The total number of deaths after adjusting for outward and inward transferable deaths was 3,282 compared with 3,426 in 1963. The crude death-rate based on the mid-year estimated population was 10.56, compared with 11.21 in 1963. Cardiovascular disease accounted for 1,724 deaths (52.53% of the total), malignant disease for 615 (18.74%) and bronchitis and pneumonia for 292 (8.89%). There were 2,631 deaths in these three groups, which collectively account for over 80% of the total deaths.

Lists of the causes of deaths, classified under the thirty-six headings of the International Statistical Classification of Diseases, Injuries and Causes of Death, 1948, are given on pages 75

to 78, whilst the history of the rate, together with other vital statistics for 1912-1964, are shown in graph form on page 12. Comparability factors for each urban and rural district (pages 75 and 76), have been provided by the Registrar General for adjusting the local birth and death rates. The comparability factors make allowance for differences in age and sex distribution, and when multiplied by the crude birth and death rates of an area, make them comparable with the rates of other areas similarly adjusted.

3. Births. The number of live births assigned to the County was 5,937 (3,105 males and 2,832 females), compared with 5,692 in 1963, giving a birth rate of 19.10 per 1,000 population, compared with 18.4 for England and Wales.

4. Stillbirths. The number of stillbirths registered was 81 compared with 90 in the previous year. The rate per 1,000 total births was 13.46 compared with 15.57 for 1963, and with 16.3 for England and Wales.

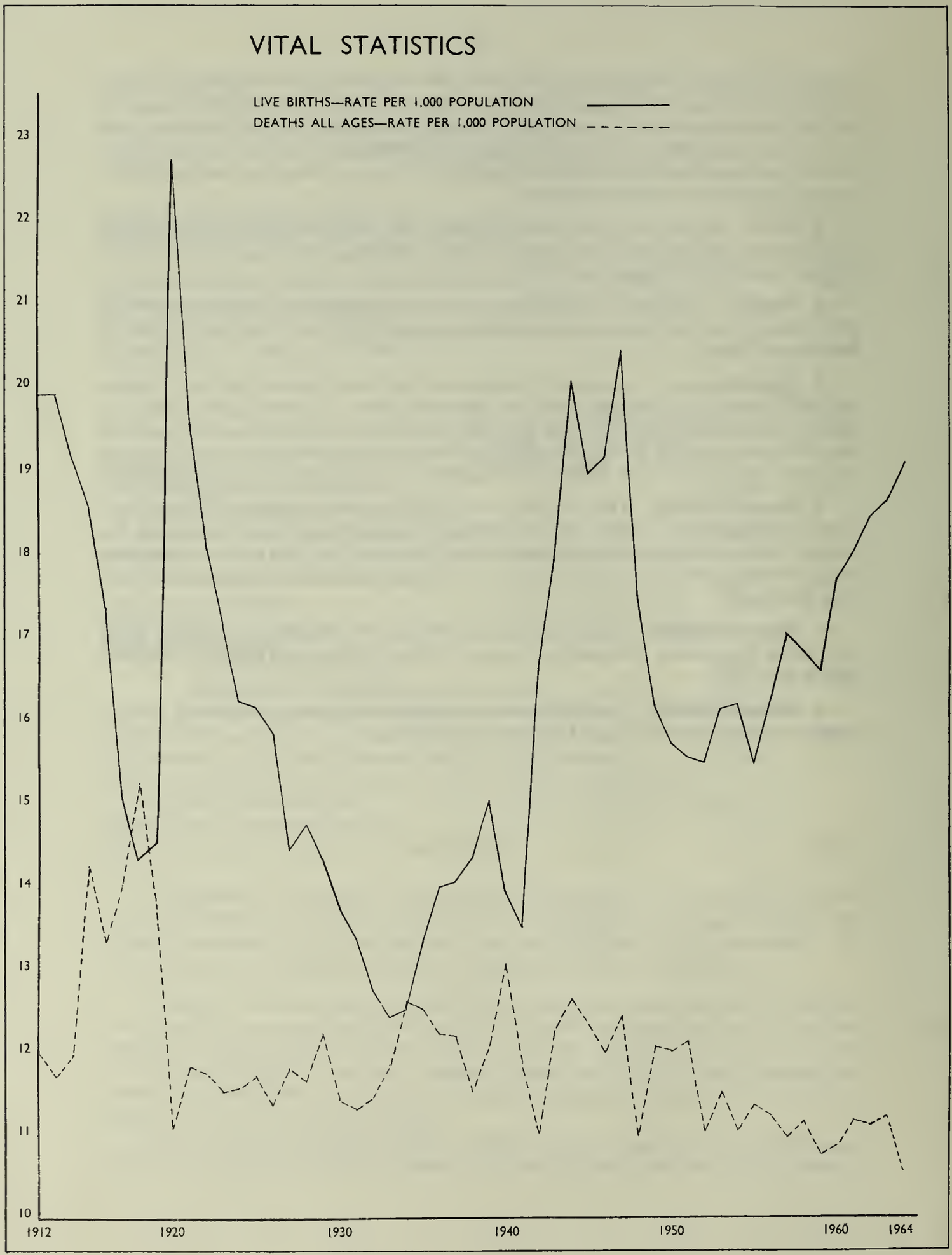
5. Infant Mortality. The number of infants who died before attaining their first birthday was 109 (53 males and 56 females), compared with 102 in 1963. The 1964 figure includes five deaths in illegitimate babies. The rate per 1,000 related live births was thus 18.36 compared with 20.0 for England and Wales. The history of the rate for the past fifteen years is shown in graph form on page 13, and an analysis of the apparent causes in 108 cases is given on page 23.

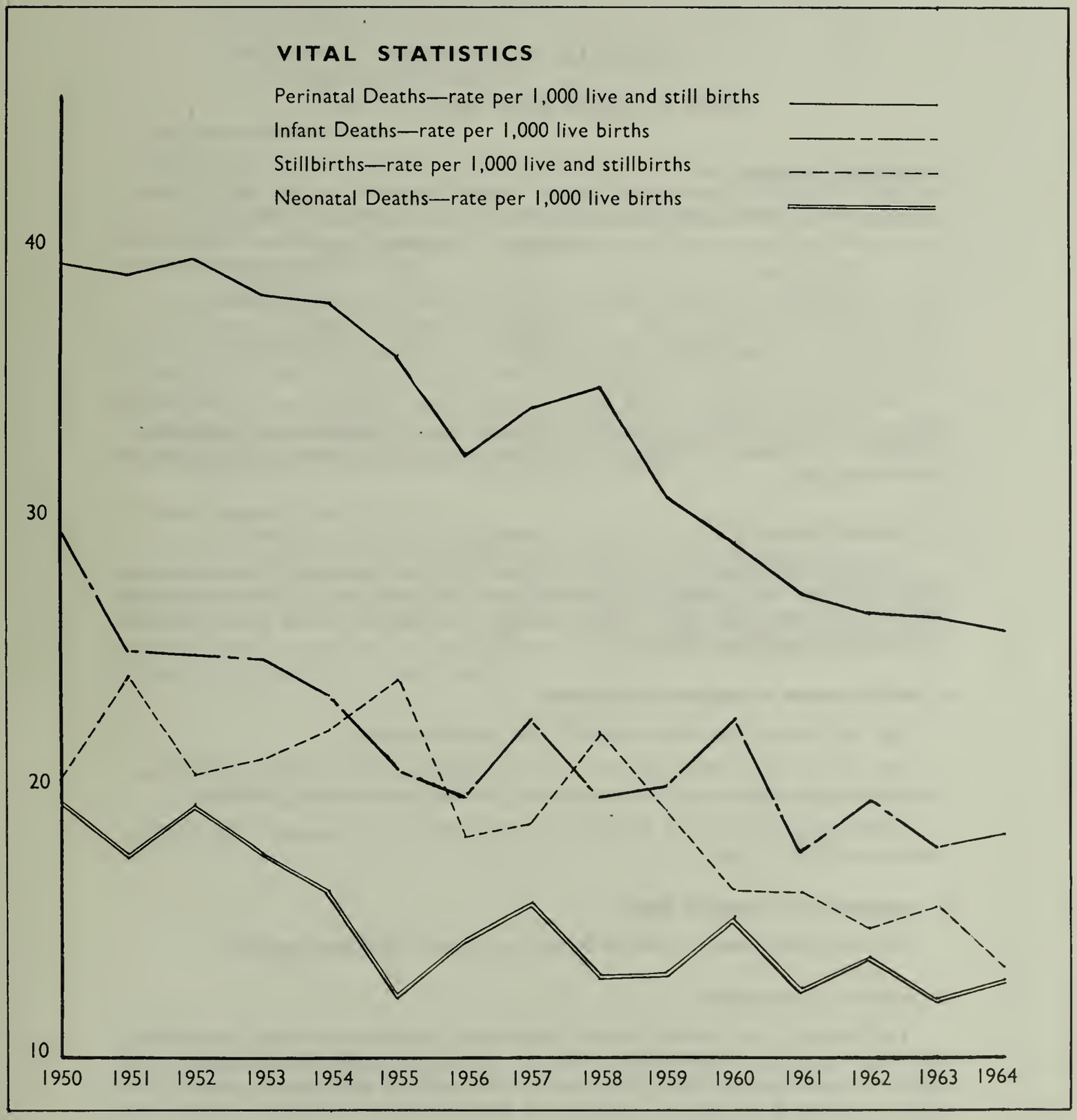
6. Neonatal Mortality. This sub-division of the infant mortality comprises all infant deaths within twenty-eight days of birth, and of the 109 infant deaths, 77 were classed as neonatal. The rate per 1,000 live births was 12.97 compared with 12.30 for 1963, and with 13.8 for England and Wales. Seventy of the 77 neonatal deaths were in the first week of life, the main causal factor being prematurity.

7. Perinatal Mortality. There was a total of 151 cases (81 stillbirths and 70 deaths under one week) in this category, the mortality rate being 25.09 per 1,000 live and stillbirths, compared with 26.46 in 1963.

8. Maternal Mortality. One woman died from causes associated with childbirth, giving a maternal mortality rate of 0.17 per 1,000 live and stillbirths.

VITAL STATISTICS




VITAL STATISTICS
Perinatal Deaths—rate per 1,000 live and still births
Infant Deaths—rate per 1,000 live births
Stillbirths—rate per 1,000 live and stillbirths
Neonatal Deaths—rate per 1,000 live births
40
30
20
10
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964

CARE OF MOTHERS

(Section 22—National Health Service Act, 1946)

1. Notification of births

The number of births notified, after adjustment for transferred notifications was :

	Live Births	*Stillbirths*	*Total*
Domiciliary	1,542	12	1,554 (26.5%)
Hospital	4,234	65	4,299 (73.5%)
Total	5,776	77	5,853 (100%)

The proportion of babies born in hospital and at home is almost exactly the same as in 1963, and the figure of 26.5% is lower than the national one of 32% (Ministry of Health Report for 1963). This indicates the higher than average availability of obstetric hospital beds in Northamptonshire.

2. Premature infants ($5\frac{1}{2}$ lb. or less at birth, irrespective of the period of gestation)

There were 289 premature live births, of which 35 were at home, and 23 premature stillbirths, of which one was at home. The total number of premature births (312) shows an increase over 1963, when there were 256. Of the premature live births, 92.2% have survived the neonatal period during the past five years.

3. Deaths ascribed to pregnancy or childbirth

Only one maternal death was reported by the Registrar General.

The causes of death, which occurred in hospital, following cæsarian delivery of the baby, were acute cardio-respiratory failure, acute hepatic necrosis, and eclampsia gravidarium.

The maternal death rate per 1,000 live and still births was 0.17 compared with a rate for England and Wales of 0.25.

4. Relaxation and parentcraft classes

Details of these classes are given in the section on Health Education (page 37).

5. Maternity accommodation

The booking of cases on social grounds continued to be carried out by the County Health Department on behalf of the hospital authorities. It was not possible to accommodate every mother who would have preferred to be confined in hospital, and all cases were assessed by the district midwives in the light of domestic and other relevant circumstances. Women who require hospital admission for medical as distinct from social reasons are admitted under arrangements made by the consultant obstetricians.

The numbers of cases booked each month were:

Barratt Maternity Home, Northampton	32-40
St. Mary's Hospital, Kettering	26
Corby Maternity Unit	60
Park Hospital, Wellingborough	64

6. Care of unmarried mothers

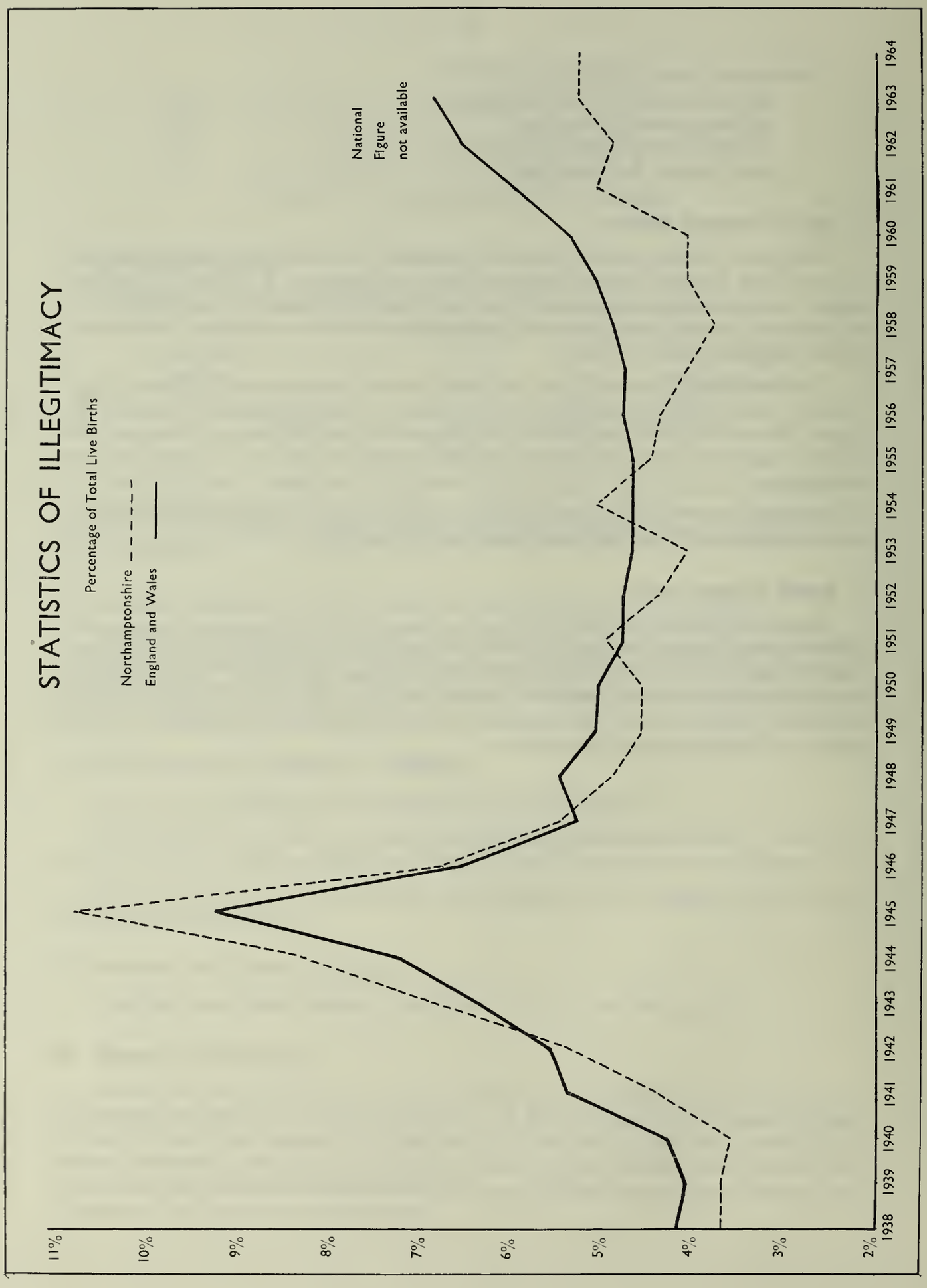
The County Council accepted financial responsibility for 32 unmarried mothers who were admitted to St. Saviour's Diocesan Maternity Home, Northampton, or to similar homes elsewhere. Each girl was required to pay 54/- per week towards the cost, if she was receiving the full maternity benefit, and in some cases, contributions were also received from other sources, such as parents or putative fathers.

The Peterborough Diocesan Family and Social Welfare Council received a grant of £1,200 from the County Council for its work in the community. Of the 314 illegitimate births in the County, 109 were helped by social workers, 85 of these being first pregnancies. The ages of the mothers ranged from 15 to over 30 years, with the age group 15-21 years accounting for 77 of the 109 cases.

The illegitimacy rate dropped very slightly, compared with 1963, and the variations in this rate during the past 25 years are shown in the graph on page 16.

7. Family planning clinics

Seventeen women attended the Northampton Women's Welfare Association clinic, and 13 went to the Rugby Family Planning Clinic. At the County Council's own clinics, 74 women made a total of 322 attendances at Kettering, and 42 made 170 attendances at Corby. The total number of women making use of these services in 1964 was thus only 146, compared with 427 in 1963, and there is little doubt that this substantial fall has been due to the increasing use of birth control pills obtained through family doctors.


STATISTICS OF ILLEGITIMACY
Percentage of Total Live Births
Northamptonshire
England and Wales
National Figure not available
11%
10%
9%
8%
7%
6%
5%
4%
3%
2%
1938 1939 1940 1941 1942 1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964

CARE OF YOUNG CHILDREN

(Section 22—National Health Service Act, 1946)

1. Child welfare centres

The number of fixed child welfare centres increased by one to a total of 61. Of these, four are held in purpose-built premises (Corby, Pen Green Lane ; Kettering ; Rushden ; and Wellingborough), two in adapted premises (Corby, Beanfield ; and Desborough), and the remaining 55 in hired buildings. In addition, the services provided in rural areas by the mobile health clinic have been extended to include 39 villages, while mothers and children from a further 46 villages are conveyed to it by the estate car which tows the caravan. These figures show increases of four and nine respectively over the corresponding ones for 1963. The towing vehicle has continued to be useful for general transport purposes in the Health Department, while the clinic itself has been used for school health work in rural localities where adequate medical inspection rooms are not available at the schools. A full list of child welfare centres throughout the county will be found on page 25.

The number of children under one year of age who attended child welfare centres for the first time was 4,959, and they made a total of 42,923 attendances, this figure representing an increase of 4,897 (12.8%) over 1963. Attendances of children between the ages of one and five years were 26,796 compared with 21,303 in 1963, an increase of 5,493 (25.8%). The upward trend in attendances at child welfare centres is shown in the graph on page 26, from which it will be seen that, within the past decade, the number of infants under the age of one attending child welfare clinics has almost doubled. A relatively small part of the increase in the attendances of children under the age of one during 1964 was the continued success of the mobile clinic. A total of 332 such children, as well as 150 between the ages of one and five years, attended it for the first time during the year, and a total of 3,584 attendances was made compared with 2,693 in 1963, an increase of 891 (33.1%). Another helpful factor was the continuing availability of free 'bus facilities to serve 22 rural centres. A total of 266 journeys was made to convey 3,146 mothers and 4,239 children.

In addition to these minor factors, however, there is the clear fact that child welfare facilities throughout the county are being used more and more by mothers every year, and this is a phenomenon in no way confined to Northamptonshire. With the coming of the National Health Service in 1948, many people thought that the work hitherto carried out at child welfare centres would increasingly be undertaken by family doctors but, while some indeed run their own baby clinics, the majority, for a variety of reasons, do not, and this is one of the reasons for the steadily increasing number of attendances at local authority child welfare clinics. Modern mothers seem particularly anxious to learn as much as possible about the care of their infants and can do so at clinics, where they also have the opportunity of gaining confidence from discussing their problems with other mothers and with the health visiting and medical staff who are in attendance. A substantial proportion of local authority medical manpower is devoted to the running of child welfare clinics and there is need for a reappraisal of the medical work being carried out at them, not merely in view of the overall shortage of doctors in Britain, but also because it is clear that the functions which are now appropriate to child welfare clinics are different from those which applied half a century ago when the child welfare movement came into being. The Standing Medical Advisory Committee of the Minister of Health's Central Health Services Council has

set up a sub-committee to study and to report on the medical work and medical staffing of child welfare centres, and Dr. M. Reid, part-time Assistant County Medical Officer of Health, has accepted an invitation to join this body.

2. Mothers clubs

The popularity of mothers clubs, run in association with child welfare clinics, has been maintained, and there is a total of nine throughout the county, three being in Corby, two in Wellingborough, and the remainder at Bugbrook, Daventry, Kettering and Rushden respectively. These clubs provide programmes which include both educational and social components and, in all cases, members of the health visiting staff assist in their running.

3. Play centres

Play centres, organised by mothers clubs, have continued to be held at the Wellingborough health clinic and at Beanfield clinic in Corby. These centres are open once and twice a week respectively in the mornings and provide facilities for mothers to have short breaks from caring for their children, knowing that they are being well looked after by a rota of helpers organised from amongst the members of the clubs. Full programmes of educational play activities are undertaken and, once again, the health visitors take an active interest in these projects.

4. Child guidance

This service, which is available to pre-school children where necessary, is dealt with in Part II of " The Health of Northamptonshire in 1964 ".

5. Speech therapy

This is likewise considered in Part II.

6. Nurseries and Child-Minders Regulation Act, 1948

There was a further substantial increase in applications for registration during the year, and at 31st December, the premises registered under the Act were :

" Oakroyd " Day Nursery, Finedon Road, Wellingborough	18 children
Parish Hall, Weston Favell, Northampton	16 children
25 Back Lane, Hardingstone	6 children
4 East Street, Long Buckby	16 children
4 Selsey Road, Corby	7 children
" Queen Anne's ", Oundle	12 children
" Avonhurst " and " Miles Well House ", Lumbertubs Lane, Boothville, Northampton	14 children
The Old School, Cransley	8 children
17 Watford Road, Crick	10 children
Stoke Plain, Towcester	7 children
" West View ", Charlton	16 children
284 Newton Road, Rushden	8 children
4 Lodge Avenue, Collingtree	7 children
56 Newton Road, Rushden	16 children
" Sunnyside ", Mears Ashby	10 children
Total	171

In all cases, applicants for registration and their assistants are required to have a chest X-ray examination. The Chief Fire Officer also arranges for a member of his fire prevention staff to visit and advise on fire precautions.

The health visiting staff maintains close liaison with all child minders and nurseries and, in addition to submitting regular reports, supply much informal advice to those in charge of the premises. No adverse reports were received during the year, and it was clear that the facilities were fulfilling a social need. It seems likely that, with the increasing employment of married women in the professions and in industry, the demand for nursery facilities will continue to rise in the future.

7. Distribution of Welfare Foods

It is the policy of the Health Department to establish centres for the distribution of national dried milk, cod liver oil, vitamin tablets and orange juice wherever there is a demand. There is a full-time centre at County Hall and part-time distribution centres are manned by Health Department staff at Corby, Daventry, Kettering, Rushden and Wellingborough ; foods are also sold by the driver of the mobile clinic. Other distribution centres are manned by voluntary helpers who sell the foods from their homes, from shops or at child welfare centres.

The total number of centres of all types at the end of the year was 149, of which six were manned by paid staff and 143 were staffed by voluntary workers; 27 of these voluntary centres were at child welfare clinics.

The number of items distributed was :

National dried milk	76,629
Cod liver oil	6,078
Vitamin A and D tablets	6,133
Orange juice	72,096
Total	160,936

During the year there was no change in the price of welfare foods and the total number of items distributed was about 2,000 more than in 1963.

8. Dental care

Report by the Chief Dental Officer

Dental inspection and treatment continued to be available for expectant and nursing mothers and pre-school children in all dental clinics in the county. Following the increase in staff available during the year, the amount of treatment given to these priority classes of patients once again increased.

It is probable that the majority of expectant and nursing mothers who receive dental attention do so through the services of general dental practitioners operating under the National Health Service, and treatment for these priority groups is free. On the other hand, the steady increase in the number of children under the age of five who obtain their dental treatment through the local authority dental service is significant, as this group is particularly time-consuming, but nevertheless extremely important.

While some satisfaction may be gained from the improving state of dental health in school children in the older age groups, there must be no complacency about the situation at the lower

end of the scale, where it is apparent that something like 75% of children of three years of age are already presenting dental caries in one or more teeth. Significantly, the pattern of treatment for these very young children has changed over the past five years in that, while the overall numbers presenting themselves for treatment has increased each year, the number of extractions carried out has fallen and the number of fillings has increased. Some satisfaction can, therefore, be felt at the more constructive nature of the treatment which the augmented dental staff can now perform for pre-school children and it must be emphasised that, but for the local authority dental service, many of them would continue in a state of poor dental health until receiving attention, again from the local authority service, after commencing school.

In the coming year it is hoped to increase the number of dental inspections available at child welfare clinics and it is proposed also to initiate a scheme whereby all children whose third birthdays fall during 1965 will be invited to present themselves at the nearest clinics for inspection and, if necessary and desired, for treatment. In this way it should be possible again to increase the number of young children who avail themselves of the opportunity to become dentally fit. Increased efforts towards improving the type and scope of dental health education will also be made during the coming year, with considerable emphasis on the need for correct dietary habits and the maintenance of a high standard of oral hygiene in young children. Local authority dental services clearly have a major responsibility towards the under five age-group who demand, as patients, a greater amount of time spent on them in order to achieve satisfactory conservative dentistry, and great patience in introducing them to the dental surgery at a very tender age so that their fears of dentists, dental surgeries and dental treatment are dispelled for all time.

Dental work amongst schoolchildren is covered in Part II of " The Health of Northamptonshire in 1964 ".

(a) Numbers provided with dental care :

	Examined	*Commenced Treatment*	*Made Dentally Fit*
Expectant and Nursing Mothers	72	65	38
Children under five	696	499	621

(b) Forms of dental treatment provided :

	Extractions	*General Anaesthetics*	*Crowns and Inlays*	*Fillings*	*Scalings and gum treatment*	*Silver Nitrate treatment*	*Radiographs*	*Dentures provided*	
								Complete	*Partial*
Expectant and Nursing Mothers	138	16	1	122	27	3	23	25	16
Children under five	367	185	—	424	12	279	7	—	—

9. " At risk " register

In the annual report for 1963, preliminary reference was made to the establishment of a register of children considered to be at risk of developing any physical or mental handicap, and it was explained that such children were to be registered under the following groups :—

(1) Significant family history of disease.
(2) History of antenatal or perinatal disease or injury.
(3) Postnatal disease or injury.
(4) Developmental defect.

Where any relevant adverse condition is thought to be present, the primary responsibility for registration rests upon the health visitor. She notes the fact on her record card and, when this is routinely sent to the County Health Department, the child's name is placed on the central register and a special tag is fixed to the health visitor's card to remind her that the child has, in fact, been registered. In the case of antenatal or perinatal disorders, analogous information is obtained from the maternity hospital, family doctor, or midwife by means of the birth notification card, which has been redesigned to include this information. In this latter connection, many children are known to be at risk within the first two days of life and are therefore registered, this fact being communicated to the health visitor prior to her first visit to the child.

Health visitors pay close but unobtrusive attention to children considered to be at special risk and, where a pædiatrician or family doctor is also involved, every effort is made to encourage the mother to keep her appointments. In other cases, the health visitor continues to exercise vigilance, and children are removed from the register only once she is satisfied that no element of risk remains. Particular attention will be paid to the condition of the children at the age of two, and again at four years when, if need be, medical assessments can also be made.

The scheme came into operation on October 1st 1963 and the following table shows the number of registrations which took place during that year as well as in 1964. In the latter year it will be seen that just over a quarter of all live births were, in fact, entered in the register and it need hardly be said that it is anticipated that, in the great majority of cases, the children can, in due course, be pronounced normal. It is hoped that, as this scheme develops, it will provide a rational system for the early detection of handicaps while, at the same time, helping towards a more selective approach to health visiting and medical work. It will be of the utmost importance to ensure that the system does not degenerate into a mere paper exercise and, with the anticipated appointment of a senior member of the central Health Department staff to pay particular attention to the whole question of child care, a critical and continuing review of the system should be commenced before the end of 1965.

Group	Category	Born in 1963 (October to December)	Born in 1964 (January to December)
FAMILY HISTORY	Deafness	4	20
	Blindness	—	4
	Epilepsy	9	27
	Diabetes	12	46
	Tuberculosis	11	29
	Mental disorders	7	34
	Congenital abnormalities ...	5	15
	Young or elderly mother ...	11	29
	Social	9	20
	Other	7	16
ANTENATAL OR PERINATAL	Hyperemesis	4	24
	Hydramnios	—	12
	Toxæmia	36	179
	Placenta prævia	—	2
	Threatened abortion	8	38
	Forceps delivery	68	211
	Cæsarean section	33	192
	Abnormal presentation	22	109
	Premature	31	124
	Post-mature	8	80
	Asphyxia	14	79
	Rh. incompatibility or blood disorder	4	36
	Multiple birth	9	35
	Jaundice	16	45
	Congenital abnormality ...	19	117
	Other	18	47
	Post-natal	11	31
	Developmental	1	—
	Totals	377	1601

10. Causes of deaths of children under one year

Details of these deaths are given in the table. These figures have been prepared from an analysis of death returns received from the local registrars, and differ slightly from those quoted by the Registrar General. According to the latter there were 109 children who died under a year. It must be emphasised that this table is based only on the information contained in death certificates, and that practitioners vary in the way they complete these. For example, the death of a premature baby who died from asphyxia or from cerebral hæmorrhage might be ascribed to either of the latter without the fact that it was premature being noted. If, however, prematurity was mentioned on the certificate, the death would be classified under this heading.

Infant Mortality

Cause of Death	*Age in weeks*					*Total*
	–1	–2	–3	–4	4–52	
Prematurity	48	1	—	1	1	51
Congenital malformations	7	1	—	2	8	18
Respiratory diseases	3	—	1	—	10	14
Infections (other than lung and gut)	1	—	—	—	6	7
Asphyxia and atelectasis	5	—	—	—	2	7
Birth injury	2	1	—	—	—	3
Accidents	—	—	—	—	2	2
Enteritis and diarrhœa	—	—	—	—	3	3
Hæmolytic disease	2	—	—	—	—	2
Other causes	1	—	—	—	—	1
Totals	69	3	1	3	32	108

Prematurity is still the greatest problem and almost half of the deaths were primarily due to this cause. Of the 48 premature infants who died in the first week of life, 35 died within 24 hours of birth. Congenital abnormalities and respiratory diseases remain second and third respectively, with the fourth place being shared by infections (other than those of the lung and gut), and asphyxia and atelectasis. Of the remainder, it should perhaps be mentioned that both the deaths attributable to accidents were caused by asphyxia due to the inhalation of vomit.

11. Register of congenital abnormalities

As has been explained, congenital malformations are one of the remaining major causes of death amongst children in the first year of life as well as contributing towards the stillbirth rate. As the number of deaths from this cause is comparatively small in any given administrative area, research into congenital malformations calls for a national approach and, following a request from the Ministry of Health, arrangements were made for the collection and registration of congenital abnormalities found to be present at birth. This was achieved by a modification of the birth notification card which is sent to the County Health Department by the general practitioner or midwife in attendance at the birth.

Full co-operation has been received from pædiatricians, family doctors, maternity hospital staff, and domiciliary midwives, and it seems probable that most of the principal congenital abnormalities were reported. It is hoped that this information will be useful for research purposes at the national level, but it is also of local interest and it is particularly helpful to be able to inform health visitors, prior to their first visits to infants, about any congenital abnormalities which may be present.

In the course of the year, 128 babies were reported, with a total of 164 congenital abnormalities. An analysis of the abnormalities is as follows :—

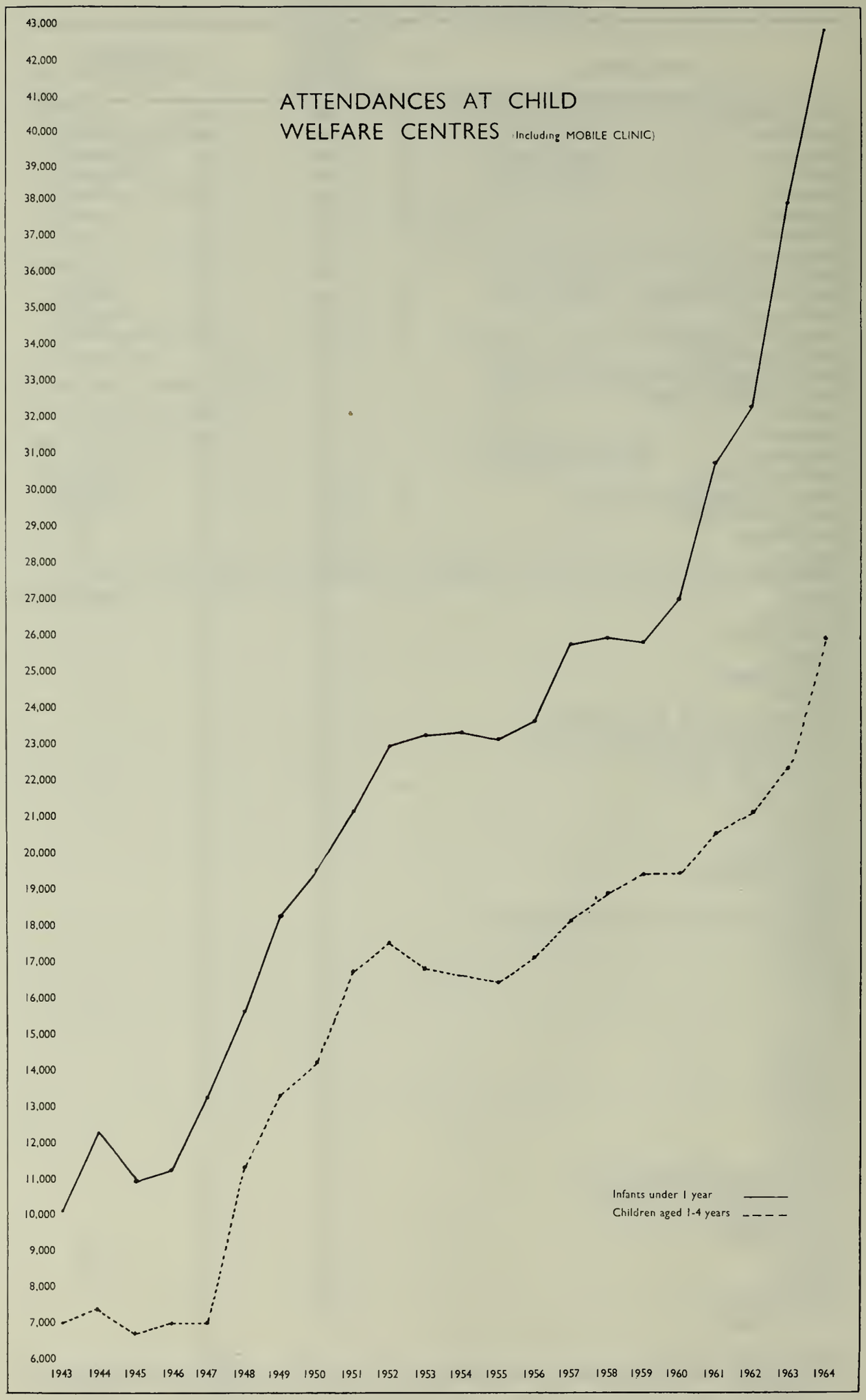
LIMBS	
Reduction deformities	6
Polydactyly	2
Syndactyly	5
Dislocation of hip	4
Talipes	32
Other	10
ALIMENTARY SYSTEM	
Cleft lip	6
Cleft palate	10
Rectal and anal atresia	1
Not specified	3
HEART AND GREAT VESSELS	
Congenital heart disease	8
URO-GENITAL SYSTEM	
Hypospadias / Epispadias	5
Other	1
CENTRAL NERVOUS SYSTEM	
Anencephalus	9
Encephalocele	1
Hydrocephalus	10
Spina bifida	14
EYE OR EAR	
Anophthalmos or Microphthalmos	2
Accessory auricle	1
Not specified	8
SKELETAL (OTHER THAN LIMBS)	
Skull and face	5
Ribs and sternum	1
Other	1
OTHER SYSTEMS AND MALFORMATIONS	19

Of the 128 cases where abnormalities were apparent at birth, 12 were stillborn and 18 died subsequently.

CHILD WELFARE CENTRES

Name of Centre	*Average No. of children attending per session*	*Sessions held By Doctor*	*By Health Visitor*
Barton Seagrave	48	29	—
Boothville	44	24	—
Boughton	40	12	—
Bozeat	29	12	—
Brackley	66	12	—
Brigstock	28	12	—
Brixworth	26	12	—
Broughton	31	12	—
Burton Latimer	58	12	12
Cold Ashby and Welford	46	13	—
Collyweston	42	12	—
Corby (Pen Green Lane)	49	50	—
Corby (Beanfield)	42	61	38
Corby (Diagnostic Centre)	73	51	1
Corby (Elizabeth Street)	47	46	2
Daventry	39	24	—
Deanshanger	82	12	—
Desborough	74	15	9
Doddington, Great	41	12	—
Duston (Congregational Church)	51	22	—
Duston (Rifle Butt)	106	23	—
Earls Barton	41	15	9
Finedon	37	12	12
Geddington	40	12	—
Gretton	17	12	—
Hackleton	22	12	—
Hardingstone	33	12	12
Helmdon	43	12	—
Higham Ferrers	55	24	—
Irchester	65	12	12
Irthlingborough (St. Peter's Hall)	52	15	—
Irthlingborough (Community Centre)	43	12	—
Kettering (School Lane)	39	151	—
Kettering (St. John)	34	12	11
Kings Cliffe	16	13	—
Kings Sutton	65	12	—
Kislingbury	60	13	—
Long Buckby	37	12	—
Middleton Cheney	61	12	—
Moulton	41	24	—
Old Stratford (commenced 3rd December)	35	1	—
Oundle	37	12	—
Potterspury	30	12	—
Raunds	40	12	—
Roade	38	12	—
Rothwell	39	15	9
Rushden	71	68	—
Silverstone	42	12	—
Spratton	21	12	—
Thrapston	23	12	—
Towcester	33	12	—
Weedon	24	12	—
Weldon	31	12	—
Wellingborough (Oxford Street)	61	73	1
Wellingborough (St. Andrew's)	34	24	—
West Haddon	44	12	—
Weston Favell	35	24	22
Wollaston	35	12	12
Woodford	20	12	—
Woodford Halse	36	12	—
Yardley Hastings	47	12	—
Mobile Clinic	9*	410†	1
TOTALS	—	1,672	163

* Average attendance per village † Visits to villages


ATTENDANCES AT CHILD WELFARE CENTRES (Including MOBILE CLINIC)
43,000
42,000
41,000
40,000
39,000
38,000
37,000
36,000
35,000
34,000
33,000
32,000
31,000
30,000
29,000
28,000
27,000
26,000
25,000
24,000
23,000
22,000
21,000
20,000
19,000
18,000
17,000
16,000
15,000
14,000
13,000
12,000
11,000
10,000
9,000
8,000
7,000
6,000
1943 1944 1945 1946 1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964
Infants under 1 year
Children aged 1-4 years

MIDWIFERY

(Section 23—National Health Service Act, 1946)

1. Statistics

The following table shows the number of cases attended by midwives in the past eleven years.

Year	*Doctor not booked for attendance at delivery*		*Doctor booked for atttendance at delivery*		Total
	Doctor present	*Doctor not present*	*Doctor present*	*Doctor not present*	
1954 ...	12	682	445	540	1679
1955 ...	16	555	425	696	1692
1956 ...	42	582	424	621	1669
1957 ...	54	513	408	719	1694
1958 ...	44	598	340	808	1790
1959 ...	74	525	326	896	1821
1960 ...	54	528	298	991	1871
1961 ...	51	436	293	950	1730
1962 ...	12	89	348	1088	1537
1963 ...	8	47	338	1130	1523
1964 ...	9	48	318	1174	1549

There was a slight increase over 1963 and it should be emphasised that, irrespective of whether they were or were not booked for attendance at delivery, doctors supplied ante-natal care in virtually all cases.

2. Midwives

The number who notified their intention to practise was 115. Of these, 78 were employed by the County Council (including relief midwives), 36 by Hospital Management Committees, and there was one independent midwife.

3. Co-operation with maternity hospitals

There is close co-operation between the County Health Department and the various maternity hospitals throughout the county. Where patients have to be booked for social as distinct from obstetrical reasons, reports on the home circumstances are prepared by county midwives and, on the basis of these reports, the available beds are allocated on behalf of the hospitals. In addition, where patients are booked for medical reasons at St. Mary's Hospital, Kettering, social reports are prepared by county midwives to indicate whether early discharge is possible and, where this can be undertaken, advice and assistance is supplied to mothers in making the necessary domiciliary arrangements.

Where a policy of early discharge from hospital can be implemented in suitable cases, it is possible to make the fullest use of available obstetrical beds and, during 1963, of the 4,299

hospital confinements, discharge of mothers before the tenth day took place in 1,874 cases (43.6%). There is, of course, no question of considering early discharge where the mother is in any way medically unfit for it and, indeed, it should be added that, in most cases, mothers are, in fact, anxious to return home before the traditional ten-day lying-in period is complete. In one hospital, patients remained on average for only five days after the birth of their babies and both there, as well as in the case of the other hospitals practising selective early discharge, it must be borne in mind that there is a considerably increased demand for help from the domiciliary midwifery services.

There was one small but significant development during the year at Brackley Cottage Hospital where, by agreement between the Hospital Management Committee and the County Health Committee, it was agreed that the county midwives practising in the area should be permitted to conduct the confinement of their own patients in the hospital. This is an arrangement which is satisfactory from the points of view alike of the patient, the midwife and the hospital, and it is to be hoped that similar arrangements can be made elsewhere, as there is much to be said for a combined hospital and domiciliary midwifery service.

An interesting experiment was started during the year in conjunction with St. Mary's Hospital, Kettering. Under this arrangement, midwives from the domiciliary service go into the maternity unit of this hospital for two-week refresher courses, midway between their statutory periods of post-graduate training, while hospital midwifery sisters come for a similar period of work with the domiciliary service. The programme provided in hospital for domiciliary midwives has been most useful and has included experience in the labour ward, being regarded by the midwives themselves as of more value than the statutory courses, which are largely theoretical. Unfortunately, shortage of hospital midwifery staff prevented any sisters from coming for a corresponding period on the district, but it is hoped that this may prove possible in 1965, when the role of the midwife as a teacher will be emphasised and there will be visits to relaxation classes, to child welfare clinics, and to family planning clinics, as well as to domiciliary confinements.

This experiment, which it is hoped to extend to the Barratt Maternity Home, Northampton, is being watched with interest by the Midwives Advisory Committee of the Oxford Regional Hospital Board, and in addition it is confidently hoped that a closer liaison between the hospital and domiciliary services will result from the arrangements which have been described.

4. Survey of hospital and domiciliary confinements

Following discussions between representatives of medical officers of health and obstetricians in the Oxford Regional Hospital Board area, it was agreed that a pilot study of certain social and medical factors involved in uncomplicated maternity cases should be undertaken in Northamptonshire. The women to be studied were those booked for delivery at the Barratt Maternity Home and those in the south of the county whose babies were born at home during the same period. There is need for much more information about many aspects of hospital and home confinements and it is hoped that this study, in which Dr. A. Barr, Statistician to the Oxford Regional Hospital Board, is participating, may help to provide some of the answers. The primary work of the survey, which began in October, is being carried out by hospital staff, domiciliary midwives, and health visitors.

5. Co-operation with general practitioners

This has continued throughout the year, 18 midwives assisting in general practitioner ante-natal clinics, two having special meetings to discuss matters of mutual interest, and others meeting family doctors at the patients' own homes in order to carry out combined ante-natal care.

6. Training of midwives

A further county midwife has been approved as a teaching midwife, and the total now stands at 15. A record number of pupils were received during the year, with 22 from St. Mary's Hospital, Kettering, and 12 from Horton Hospital, Banbury. In addition to their practical training, lectures on public health were given by the Deputy County Medical Officer of Health, and tutorials by the county administrative nursing staff. It is interesting to note that two of the pupils subsequently joined the county midwifery staff and one has been accepted for health visitor training.

7. Postgraduate courses

Thirteen midwives attended the statutory courses arranged by the Royal College of Midwives and others attended a variety of study days arranged by the health education section of the County Health Department.

8. Relaxation and mothercraft classes

Classes have continued throughout the year. Details will be found in the chapter dealing with health education (page 37).

9. Maternity outfits

1,374 maternity outfits were made available, free of charge, for use in home confinements.

10. Disposable equipment

Again there has been an increase of disposable equipment both in variety and numbers, mucus extractors, catheters and razors being added to caps, masks, enemas and syringes already used.

11. Off duty

The five-day working week is now largely established and the midwives feel the benefit of regular, planned off-duty arranged one month in advance.

12. Visits of observation

Eighty-six students came from various hospitals and from the Queen's Institute District Training School at Leicester for visits of observation. These were greatly enjoyed and gave the recipients a glimpse of a different field of activity.

13. Cars

A radio-telephone was ordered during the year for experimental use in a midwife's car and it is hoped to have this installed early in 1965.

The number of cars in use at 31st December was :

(a)	Provided by County Council	73
(b)	Privately owned	100

The 73 cars provided by the County Council were distributed as follows.

54 District nurse/midwives	10 Health visitors
3 Home help organisers	1 Audiometric nurse
2 Occupational therapists	3 Speech therapists

The fleet was also augmented by the purchase of a 7 cwt. van for the collection and delivery of nursing equipment and other Health Department purposes.

14. Houses

At 31st December, twenty houses and three cottages were owned by the County Council. Seventeen houses were rented by the County Council from district councils and one from another source.

During the year two new bungalows at Crick and one purpose-built house at Brixworth became available for district nurse/midwives, and one house was bought for a district nurse. The provision of good housing greatly helps the recruitment of staff and the purpose-built premises are particularly appreciated.

HOME NURSING

(Section 25—National Health Service Act, 1946)

1. Staff

Supervision of the nursing and midwifery staff is undertaken by the Superintendent Nursing Officer, assisted by a deputy and two assistants. The only change during the year was the appointment of Miss M. J. Twemlow, S.R.N., S.C.M., as Assistant Superintendent Nursing Officer from January. The staff again played an active part in a wide variety of health educational activities, giving talks and lectures throughout the county.

The number of field staff employed at December 31st was :

Full-time district nurses	24
Part-time district nurses	17
Full-time district nurse/midwives	57
Part-time district nurse/midwives	6
Full-time health visitor/district nurse/midwives ...	10
TOTAL ...	114

These figures show an increase of eight full-time and three part-time district nurses ; an increase of two full-time district nurse/midwives and one part-time district nurse/midwife ; and a reduction of three full-time health visitor/district nurse/midwives. The increasing number of district nurses is a reflection of the policy of concentrating midwifery in the hands of staff who devote most of their time to this branch of nursing, as this is a more economical use of midwives while, at the same time, ensuring that each one undertakes an adequate number of cases during the year in order to maintain her practical skill. In consequence, more of the district nursing work which was formerly carried out by district nurse/midwives is now in the hands of full-time or part-time district nurses.

2. Cases

The number of patients attended were as follows :

Total number of persons nursed	6,547
Number of children under five years of age at first visit ...	390
Number of persons over 65 years of age at first visit	3,168

In the report for 1963, a study was made of trends in district nursing over the period 1953/63, and a similarly tabulated summary of the period 1954/64 is as follows :

DISTRICT NURSING STATISTICS 1954-1964

Patients

Year	*Medical*	*Surgical*	*Infectious Diseases*	*Tuberculosis*	*Maternal Complications*	*Others*	*Total*	*At time of 1st visit*		*Total Visits*
								Aged 65 or over	*Under 5*	
1954	5,140	2,701	110	136	440	675	9,202	3,510	866	170,969
1955	5,791	2,520	127	87	347	709	9,581	4,256	892	172,357
1956	6,298	2,104	30	78	200	1,734	10,444	4,725	791	171,857
1957	6,309	1,881	90	118	179	3,154	11,731	4,504	796	169,250
1958	6,259	1,928	30	190	185	3,227	11,719	4,213	706	165,155
1959	6,012	1,757	4	76	115	1,633	9,597	3,712	659	155,206
1960	5,133	1,581	10	61	147	495	7,427	3,420	583	138,875
1961	5,148	1,563	41	33	142	610	7,537	3,452	500	143,552
1962	4,845	1,509	50	30	120	487	7,041	3,581	384	142,750
1963		Inform	ation clas	sified dif	ferently		6,940	3,638	403	139,589
1964		,,	,,	,,	,,		6,547	3,168	390	141,952

The decline in the total number of patients nursed, to which reference was made in the 1963 analysis, has continued, with a drop of 393 in the patients, but there was an increase in the number of elderly people who received nursing care, and an increase of 2,363 in the number of visits. It would be premature to add anything to the comments which were made in the previous annual report, but the figures will be kept under review and further comments made in future reports.

3. Equipment

Nursing time has been saved and a higher standard of sterility ensured by a large increase during the year in the use of disposable equipment. Disposable syringes and needles are invariably used and plastic sheeting, pre-packed enemas, catheters, gloves, caps, masks and paper towels are similarly supplied. Incontinence pads have been in regular use in Northamptonshire since 1960 and are of particular value in the nursing of the elderly. A total of some 33,000 was supplied during 1964.

4. Non-nursing visits

Non-nursing visits totalled 9,130, which was a reduction of 2,605 on the previous year. This was a reflection of the further strengthening of the Home Help Service supervisory staff, who were able to free nurses from what were essentially administrative duties. Nevertheless, there were 6,534 non-nursing visits paid to people over the age of 65 years and, in this group, district nurses spent much time teaching relatives and friends about how to care for the elderly. This is an important part of the district nursing service, as it is not necessary for a highly-trained nurse to perform some of the duties which add to the comfort of the elderly and which, if taught to relatives, can easily be accomplished by them.

5. Training

District nursing staff continued to spend periods of two weeks working in the wards of Kettering General Hospital, and the usual visitors were received from amongst student nurses undergoing training both there and at Northampton General Hospital. Visitors from other hospitals and organisations were also welcomed.

6. Reorganisation

Reference has already been made to the trend towards separating a proportion of midwifery from general nursing duties, and the use of nursing teams in which the midwifery is concentrated in the hands of one or two members is proving successful in several parts of the county. In addition, as retirals take place amongst the nurses working in the more remote and rural areas, attempts are being made to concentrate the area service on a team situated in one of the larger centres of population, as this is essential both for efficiency and for successful recruitment. Continuing attempts are being made to reduce the case loads of those staff who undertake combined duties as health visitor/district nurse/midwife to the maximum population of 1,800 recommended in the ten-year plan, as it is only at this figure that all three aspects of the work can hope to receive adequate attention without imposing a very heavy strain on the nurse.

7. Nursing homes

It was decided that the only home on the register could more appropriately be regarded as a welfare home, so responsibility for its continued registration passed to the County Welfare Department. It was agreed that the services of the Superintendent Nursing Officer should be at the disposal of the County Welfare Officer for advising those in charge of welfare homes about any matters relating to nursing.

8. Cars

This subject is dealt with in the midwifery section of the report.

9. Houses

This subject is dealt with in the midwifery section of the report.

HEALTH VISITING

(Section 24—National Health Service Act, 1946)

1. General

Miss M. M. Wright, who had been on the health visiting staff since 1956, was appointed Assistant Superintendent Health Visitor, and commenced duty in May. She has also acted as Group Adviser to the staff in Wellingborough, as there was no other trained Group Adviser available, and the town has particular problems which put a considerable strain on the health visitors working in that area.

The establishment of health visitors was increased by two, new posts being created in Wellingborough and in the Thrapston area. At the end of December there was the equivalent of 45½ health visitors on the staff, 1¼ less than the previous year, when one health visitor was temporarily supernumerary to the establishment. Reference has already been made to the sad death of Miss M. E. Naysmith on November 11th, just three days after her thirty-ninth birthday.

Details of visits carried out are as follows :

	1964	1963
Children born in 1964	39,562	50,532*
Children born in 1959-63...	53,327	44,635*
Tuberculosis	688	1,116
Mentally subnormal	984	1,058
Infectious diseases and other visits	11,636	10,200
	106,197	107,541

* *Figures not in comparable form.*

The following attendances were made by health visitors :

	1964	1963
Child welfare clinics	2,148	1,879
Mobile welfare clinics	412	375
Chest clinics	352	326
Immunisation clinics	84	153
Vision clinics...	48	137
Family planning clinics ...	69	74
Enuresis clinics	24	23
Venereal diseases clinic ...	81	39
Diabetic clinic	46	24
	3,264	3,030

These figures give a limited indication of how health visiting time is spent, but are no criterion by which to judge its value. It is not surprising that there were fewer home visits in

view of the increase in the time spent at clinics and the evergrowing demands for group teaching in schools (to which reference is made in Part II) and elsewhere. There was also a special factor in 1964 in the unusually long periods of sick leave of three health visitors, amounting to fourteen months between them.

2. Training

One sponsored student completed training and obtained her certificate in June. One student resigned from the course after one term, on the advice of her tutor ; another started training in September ; and three more were awarded studentships and are to commence their studies in 1965.

Eight health visitors attended post-certificate courses during the year, five at Lady Margaret Hall, Oxford, one at Southlands College, Wimbledon, and two at the University of Keele, Staffordshire, one of the latter taking a course on modern methods in health education. Five attended a two-day training course in the techniques of hearing screening tests, arranged by the Medical Officer of Health of the Soke of Peterborough.

There were four meetings with Dr. K. Stewart, consultant psychiatrist, and other members of the child guidance team. Four study days were arranged at Knuston Hall by the Health Education Organiser and forty members of the health visiting staff attended either one or two of these. The Superintendent Health Visitor attended a four-day conference at Torquay, on the care of the elderly.

The health visitors have also played their part in helping to train others. A number of the staff have taken out visitors to the county, both doctors undergoing post-graduate training, and visitors from overseas. They also take out student nurses training for state registration and, for the first time, pupils training for state enrolment. It is a useful experience for these girls, who are only familiar with the hospital situation, to see families and their problems at home, and it is to be hoped that some may be inspired to consider health visiting as a career when their basic nurse training has been completed.

3. Health education

The expansion of this work continues and an increasing number of head teachers are asking for courses to be arranged in their schools. It is becoming difficult to keep pace with the demand, as the work calls for the expenditure of much time in preparation, in addition to the regular sessions spent each week in the schools. There is inevitably conflict with the many other claims on the health visitors' time, but health teaching of children is rightly regarded as a particularly important duty. Most of the health visitors also take part in parentcraft and relaxation classes for expectant mothers, as well as continuing to accept invitations to speak to numerous organisations and groups.

Mrs. G. N. Wolfe of Brackley read a paper to an audience of doctors, mental welfare officers, health visitors and social workers at a conference on mental disorder in the elderly, arranged by the National Association for Mental Health in London. Miss M. M. Wright attended with Dr. A. Gatherer the 3rd Red Cross International Seminar at Barnett Hill on May 5th, when she gave a talk on " The Promotion of Mental Health from the Health Visitor's Point of View ". This talk was repeated later in the month at a conference of senior Red Cross Officers.

4. Attachment to general practices

Final arrangements were made for the attachment, from January 1st 1965, of nine health visitors working in Corby to the seven practices in the town, representing a total of nineteen family doctors.

5. Liaison with general practitioners and social workers

Every effort has been made to maintain good relations between health visitors on the one hand and family doctors and social workers on the other. Three family doctors (excluding those who are shortly to have health visitors attached to their practices) have well-baby clinics in their surgeries and health visitors are in attendance. There continues to be close liaison between hospitals and health visitors, and the excellent working relationship between the staff of the pædiatric department at Kettering, and the health visitors in that part of the county has again proved most beneficial.

The new offices established for groups of health visitors at Brackley, Irthlingborough and Oundle, as well as the groups already in being at Rushden, Kettering and Corby, are particularly helpful in fostering the exchange of information between health visitors, family doctors and others concerned with family welfare, as the health visitor is made more readily available and her office is a useful meeting place. During the year, the health visitors at Brackley and Rushden organised social functions to which family doctors, hospital matrons, head teachers and all medical and other social workers in the area were invited. The idea behind these parties was the fostering of good personal relationships between all concerned, and those who attended were encouraged to feel welcome to call at the health visitors' offices at any time.

6. Specialised health visiting

Mrs. M. Beardmore continued her specialised aftercare work both in diabetes mellitus and in venereal disease, being in attendance at the appropriate clinics at Northampton General Hospital. In the case of diabetes, she assists in the instruction of patients at the clinic, and also continues the process of teaching them about how to look after their disease in their own homes. In the latter part of the year she carried out a special survey of sociomedical and educational aspects of diabetes amongst some 40 children who suffer from the disease, and it is hoped to publish this as a special report in 1965.

7. Family care

The health visitor needs a strong reserve of faith in the value of the work she is doing, as results are often slow in becoming apparent and, in some cases, she may never know whether anything has been achieved. She is therefore more than usually gratified when any degree of success is manifest, as happened in the following case.

A health visitor was stopped in the street by a well groomed and pleasant looking girl of about 17 years. She did not at first recognise her as a school-child about whom she had been concerned because she came from a poor home, where the father was blind, and the mother in a chronic state of illhealth and discouragement due to frequent pregnancies, a large family, and a small income. This girl repeatedly had a verminous head while at school, and her person and clothing were usually dirty. The health visitor had taken a special interest in the child for several years, doing her best to encourage her to take an interest in her appearance and personal hygiene, yet knowing how difficult it was with no help at home. There had, however, been little apparent improvement when the girl left school. Yet here was this nice-looking girl, two years later, telling her who she was, and that it was the health visitor's influence in personal talks and in the " Health and Beauty " classes (a more attractive name than " Personal Hygiene ") taken by her at the school, that had persuaded her to make the necessary effort. This had brought about a transformation that had made the girl almost unrecognisable and the health visitor was pleased not merely with the change but with the fact that the girl had remained with the same employer since she left school.

HEALTH EDUCATION

1. Introduction

In 1959 a committee was set up by the Central and Scottish Health Services Councils under the Chairmanship of Professor Lord Cohen of Birkenhead with the following terms of reference :

> " To consider whether, having regard to recent developments in medicine, there are any fresh fields where health education might be expected to be of benefit to the public ; how far it is possible to assess the results of health education in the past ; and in the light of these considerations what methods are likely to be most effective in future ".

This committee presented its report in May 1964 and this document contains many suggestions which are of great importance to the development of health education in this country, and it might be appropriate to summarise certain of its conclusions.

Health education may take one of four main forms. It may call for specific action, for example, in taking a child to be immunised ; it may require a change of habit or attitude, as in the avoidance of cigarette smoking, over-eating, or a changed outlook on mental illness ; it may call for support for community action, as in the fight for clean air ; or it may take the form of educating patients to know when they should consult their doctors, particularly in the early stages of what may be serious disease. The health educator must persuade people to respond to health education measures and must counteract various pressures, often of a commercial nature, which are contrary to the interests of health.

Much health education is already taking place with considerable success in such fields as immunisation, mass radiography, maternal and child care, sanitary measures, food hygiene and, to a lesser extent, in attitudes to mental disorder. There is need, however, for extension of health education in these fields, with particular regard to schoolchildren, adolescents, and the middle-aged. There is also need for more such education to be given to those members of the community who are of limited intelligence.

Among the subjects about which there is more need for education are human relationships ; mental health ; dental health ; the early diagnosis of certain types of cancer ; the dangers of smoking ; the avoidance of obesity ; the need for physical exercise, recreation, and the proper use of leisure ; foot health ; clean air; and fluoridation. The health habits of middle-aged men are probably worse than they were forty years ago, and this is reflected in the fact that their improved expectation of life over the intervening period has been substantially less than that for women.

Britain spends less on health education at national level than certain other countries, and the Cohen Committee recommends increased expenditure in various specific directions. Family doctors and dentists, health staff and schoolteachers have an important role to play in health education, and it is considered that it should figure more prominently in their training. At local level, existing authorities should remain in charge of health education and specialised health educators should be provided to assist with the health education work carried out by medical, health visiting, nursing, and other staff. In order to achieve the best results, there is need for a master health education plan aimed both at individuals and at the mass of the populace. Detailed knowledge of how to achieve this again points to the need for adequately trained specialist health educators.

There are various habits and practices widespread in the community which are not in keeping with health, and these are due more to ignorance than to deliberate opposition. There appears to be a widespread public belief that medicines are necessary to regain or preserve health, and this is encouraged by the advertising of proprietary preparations. Statutory control of advertising is not thought to be the correct antidote, but reliance should rather be placed on voluntary co-operation between advertisers and the medical profession. Taxation is an appropriate instrument to try to lessen the use or consumption of certain products which have deleterious effects on health, whereas commodities which are necessary for health should not be subject to taxation.

The proposals of the Cohen Committee call for action both by the central government and by local health authorities. As far as the latter are concerned, it is particularly recommended that they should appoint specialist health educators and that these should be of a relatively senior status, and suitably trained. They should co-ordinate the work of health education which is constantly being carried out by all members of the Medical Officer of Health's staff, and should be experts in the various methods of presentation. As far as Northamptonshire is concerned, the main recommendations of the Committee were anticipated in 1961, when one of the posts of Assistant Superintendent Nursing Officer was changed to that of Health Education Organiser because that seemed a more realistic appointment in the light of current needs. The Health Education Organiser's section has gradually been strengthened and is due for further expansion in 1965. The work of the health education section is in keeping with the recommendations of the Cohen committee and the subjects which have been tackled have included many of those mentioned by that committee.

2. Organisation

All sections of the County Health Department now accept the use of visual aids as a routine part of their work, and the large amount of material required for the school teaching programme has tested the potential of the Health Education section to the full. The packing, sorting, checking, ordering and despatching of visual aids is now virtually a full-time occupation for one member of the staff. The enormous expansion in this work is summarised in the following table :

Type of Aid	1964	1963
Flannelgraphs	584	178
Demonstration Aids ...	204	93
Film Strips	1,029	789
Cine Projector	269	153
Clinic Displays	38	26

A series of photographs showing the work of the speech therapist has been produced in album form for use as a teaching aid, and it is hoped in due course to depict the duties of other field workers in the same form. Photographs of health visitors at work were loaned to the Health Visitors' Association and displayed at the Nursing Exhibition in London.

3. In-service training

The courses which were run included the following :

(a) In March, four one-day courses were held at Knuston Hall for district nurses and health visitors. The speech therapists and the audiometric nurse took part in the presentation of " Problems of Communication ", while " Life Begins at 60 " was enlivened by the personal experience of two retired people.

(b) In November, a two-day course on mental health was held at Knuston Hall for district nurses.

(c) Two meetings of all staff involved in health teaching in schools were held at Knuston Hall, to exchange views and co-ordinate policies.

(d) Three half-day training sessions were arranged for home helps from the southern and western parts of the county. The attendance was about 20 on each day.

(e) Four classes on relaxation were given by a senior physiotherapist from Northampton General Hospital to new members of the midwifery and health visiting staff and others needing a refresher course.

(f) General Staff Meetings were held on four occasions, the subjects for discussion being : " Work of the Children's Department " ; " Venereal Diseases " and " Oral Contraception " ; " Coronary Thrombosis " ; and " Physical Medicine and Rehabilitation ".

(g) Eight health visitors, two district nurses and two dental auxiliaries have spent time in the health education section in order to gain more detailed knowledge of the use of visual aids and teaching methods.

In addition to such in-service training, various groups of staff attended refresher courses outside the county.

4. Relaxation and parentcraft classes

There are 30 classes every week and 1,747 expectant mothers attended an average of 6 sessions each. The film, " To Janet—a Son," is now extensively shown throughout the county to expectant mothers and fathers.

5. Clinic displays

As the number of purpose-built clinics increases, so the number of displays must grow. The monthly rota continues and smaller boards have been installed in dental waiting rooms. " Obesity " and special dental displays have been added to the many themes already in use.

6. Schools

The teaching in some girls' schools has been consolidated, but there is still a demand for further expansion.

A new venture is the introduction of a comprehensive programme of health teaching for boys, and this is being done very successfully by two male district nurses. The natural outcome of these separate forms of teaching has been the introduction of the syllabus to mixed groups in the schools where this is the usual pattern of learning ; it has been accepted by the pupils as quite a natural trend and seems to be equally acceptable when presented either by a health visitor or by a male district nurse.

A further account of this work will be found in part II of " The Health of Northamptonshire in 1964 " (p. 7).

7. Venereal disease

The publicity given to the increased national and international incidence of venereal disease has led to more requests for information, and many local organisations have been given talks and film shows. One session of the teaching in senior schools is devoted to this subject and out-of-school discussions by the pupils have resulted in requests for visits to youth clubs to talk about venereal disease.

8. Smoking and health

This subject is always in the forefront of health education programmes. It is given special mention in school teaching, and grammar schools have had lectures by medical officers. Youth Clubs throughout the county have, for almost a year, used the film " Smoking and You ", and " The Smoking Machine " has been in great demand for younger age groups and for primary schools.

9. The Mental Health Project

The second public attitude survey was completed in March and the final meeting of the campaign held in April ; the audience included members of the British Red Cross Society, the staff of St. Crispin Hospital, and personnel of the County Health Department.

10. External activities

(a) " Nutrition, Your Figure and You "—animated and with sound effects, proved a very attractive and informative display at both British Timken and the County Agricultural Shows.

(b) A teacher's course on health education in schools was held at Knuston Hall for one day in October.

(c) Home Safety Competition

The problem of safety in the home is an important field for health education, and it was felt that a special approach was needed in order to overcome the twin difficulties of lack of interest in the subject and failure of most people to see its relevance to their own domestic circumstances.

The housewife appeared to be the key person to aim at and, with this in mind, the Northamptonshire and Soke of Peterborough Federation of Women's Institutes was approached and readily agreed to co-operate in a county-wide competition between Institutes on home safety. The first round consisted of a written questionary which was answered by 3,450 members, belonging to 147 institutes, and the two best competitors from each institute were chosen for the area finals. These finals, which took place in 29 areas, were run on the lines of a television panel game, and dealt with all aspects of home safety. There then followed an eliminating written test to reduce the number of finalists to ten.

A grand final was held in Northampton before a large audience of Women's Institute members. A sketch entitled " Hazard House ", written and presented by members of the health education staff, exemplified the dangers to be found in the kitchen and living room, and the finalists had to list as many of the hazards as they could recognise. Prizes were presented to the winning institute and to the runner-up.

The competition involved the entire rural area of the county and it is estimated that its messages about home safety reached at least 14,000 members of the public.

(d) A two-day residential course was held at Knuston Hall in April as a joint project by the County Health Department and the staff of St. Crispin Hospital for the Queens Institute of District Nursing, its theme being the role of the district nurse in mental health. A total of 24 nurses from all parts of Great Britain took part, together with one from Sweden.

11. Mass media

The local press continues to take an active interest in the work of the Health Department. The Home Safety Quiz was discussed on the radio by the Health Education Organiser and presented as a television series by the County Medical Officer and his Deputy. It is hoped to edit the four television episodes into a teaching film.

PREVENTION OF ILLNESS, CARE AND AFTERCARE

Section 28—National Health Service Act, 1946

1. General

A wide variety of services is supplied under Section 28 of the Act, and most of these are described on other pages of this report. A brief description will now be given of several which are not covered elsewhere.

2. Provision of nursing equipment

With more old people in the community and with the increasing trend towards early discharge of patients from hospitals, there is a steadily growing demand for domiciliary nursing equipment. The larger items are kept and lent out centrally by the County Health Department and, at the end of the year, the following were on loan :

Walking aids	96
Push and wheel chairs	85
Commodes	85
Hydraulic hoists	14
Hospital beds (with lifting attachments) ...	6
Adult cots	4

Smaller items, such as bed-pans, aerated rubber rings, urinals, backrests and bed cradles, are supplied by the Health Department, and further stocks are held by district nurses. The service is augmented by the medical comforts depots of the Northamptonshire branches of the British Red Cross Society and the St. John Ambulance Brigade, the County Council meeting 90% of the cost of approved replacements.

During the year the appointment of part-time Health Department storeman was made full-time and a van was purchased. This has eliminated delays in the provision and collection of equipment, thus providing a more efficient service. A central register is kept in the Health Department, and articles are interchanged through the various organisations which have been described.

3. Convalescent home treatment

Convalescent treatment is provided for patients who do not require extensive medical or nursing care. Forty-six adults and five children were sent for treatment on the recommendations of family doctors, health visitors, welfare workers and medical social workers.

Vacancies were found at convalescent homes, mainly on the south coast, but difficulty was experienced in securing vacancies for the more handicapped patients. Those who are not able to look after themselves are not accepted at many homes, and there appears to be a shortage of convalescent homes which accept patients who need personal help to any substantial extent.

Escorts for the journeys to and from the homes are provided, where need be, by the British Red Cross Society.

4. Chiropody service

The arrangements for providing a chiropody service for old people are made through voluntary organisations. From 1st April, 1964, such organisations were authorised to reclaim 80% (as

compared with 75% previously) of their net expenditure, based on the Whitley Council scales, after the patients' contributions of 2/6 per head had been deducted. From the same date, the scheme was extended to include persons below retiral age who are substantially physically handicapped.

Three hundred and fifty claims for grant were received from 70 organisations. The number of treatments given was about 21,000 and the total amount of grants paid was approximately £5,200, compared with corresponding figures of 17,500 and £3,266 in 1963.

5. Occupational therapy

(i) Staff

There were no changes of staff during the year.

(ii) Mental Subnormality

The occupational therapists continue to visit the only two children who do not attend training centres.

Seventeen older subnormal males and females are also being visited at home. Close liaison continues with the training centres, especially the Henley Industrial Unit. Outwork has been harder to obtain, but some is still available to be done jointly by the trainees at the Unit and by housebound patients.

(iii) Mental Illness

At the end of the year, 46 patients in this category were either being visited at home or were attending social clubs or occupational therapy classes.

(iv) Other Patients

This group includes six patients suffering from tuberculosis, and 38 others with a variety of physical illnesses or injuries. Examples of the latter include:

(a) A man, aged 63 and suffering from angina pectoris, was referred to the occupational therapist by his general practitioner. He had not worked for about three years and was living by himself. Craftwork interested him and he has made considerable progress, and he has been able to earn some money. The occupational therapist visits every week and he is much less depressed.

(b) A young man who had had a brain tumour was referred to the occupational therapist. He was very depressed on account of having nothing to occupy his time and this made for difficulties of management within the family. Outwork was arranged and this has proved successful, so that he is now more cheerful and feels more independent through his ability to earn some money.

(v) Red Cross Clubs for the Disabled

The St. Giles' Club at Kettering and the Disabled Club at Corby continue to flourish. Numbers have increased and members have participated in outings, parties and bazaars.

(vi) Occupational Therapy Classes

The classes at Desborough and Thrapston have increased slightly over the last year. For the first time an outing was arranged to Skegness, in which members of both classes participated, and this proved most enjoyable. Once again the two classes joined together for the Christmas party at Thrapston.

The Thrapston Care Committee has continued to provide support, including transport and a bazaar, and the Women's Voluntary Service has also helped in the work of conveying patients to and from the classes.

(vii) Holidays for Disabled People

Apart from the patients registered with the Health Department, the occupational therapists also visit about 175 substantially and permanently physically handicapped patients registered with the Welfare Department. In May 1964 another successful holiday was organised by that Department at a holiday camp near Lowestoft, and the occupational therapists went as helpers.

HOME HELP SERVICE

(Section 29—National Health Service Act, 1946)

1. Supervision

The 1964 programme for the further transfer of the administrative control of the home help service from district nurses to full-time assistant organisers did not proceed as planned, owing to the fact that one of the latter (covering Kettering, Rothwell, Desborough and Corby) received serious injuries in a car accident during the course of her work, and was off duty for the last three months of the year. Under the circumstances, it was impossible to extend the field service, but progress can be reported in the training of two assistant organisers appointed during the year.

The first of the two appointments, a third assistant organiser, took up office in May and commenced her training in the area of Daventry, Long Buckby, Towcester and part of Northampton Rural District, which was already being supervised by the County Organiser. By the end of September this assistant had progressed sufficiently in her training to accept control of other areas in the south-west of the county and arrangements were in hand when, owing to the accident to which reference has been made, the scheme had to be abandoned in order to permit the assistant to undertake relief duties in the Kettering area. As an emergency measure, the appointment of a fourth assistant was brought forward from April 1965 to December 1964 and, after an initial period of training, this assistant will be stationed at Corby, being responsible for that area and the Oundle and Thrapston district.

2. Administration

The two district offices established in May 1963, one at Wellingborough and the other in Kettering, functioned smoothly and effectively. This was the first complete year of supervision by fully-trained assistant organisers each responsible for the administration of her own particular area, details of which are as follows :

WELLINGBOROUGH AREA

District covered	Burton Latimer, Higham Ferrers, Irthlingborough, Rushden, Thrapston, and Wellingborough
Population	78,000
Home helps supervised (Dec. '64) ...	166
Current cases (Dec. '64)	248

The numbers of patients receiving assistance and of home helps employed at the end of the year show an increase of 22 patients and 25 home helps over the figures for December 1963.

KETTERING AREA

District covered	Corby, Desborough, Rothwell and Kettering
Population	100,600
Home helps supervised (Dec. '64) ...	226
Current cases (Dec. '64)	340

In this area there was a rise of only four patients and one home help at the end of the year compared with 1963.

With the appointment of the third assistant organiser in May, an office for the ultimate coverage of the entire south-western area of the county was established in the Home Help Section at County Hall. At the end of the year, this district office was responsible for a population of over 22,000 covering the areas of Daventry, Long Buckby, Towcester, and part of Northampton Rural District, and provided a total of 91 patients with assistance from 80 home helps. A district office will be set up at Corby early in 1965. Meantime the fourth assistant is working from the Kettering office under the supervision of the County Organiser and covers Corby Urban District, part of Kettering Rural District and, as a relief measure, Rothwell and Desborough.

Applications for the provision of home help service come mainly from family doctors, hospital social workers, district welfare officers, health visitors, district nurses, and through various voluntary organisations. Requests, in the reorganised areas, go directly to the assistant organisers at their offices and, by the end of the year, these assistants had relieved the district nursing service of responsibility for approximately two-thirds of the total population of the county.

3. Statistics

During the past ten years, the number of cases being provided with home help has shown a steady rise. This upward trend continued during 1964, when 1,509 households received the services of a home help, an increase of 59 over 1963. The development of the service is shown in graph form on page 48.

The following table shows the classification of cases and the numbers being assisted.

Type of case	*No. of cases* 1964	*No. of cases* 1963
1. Elderly (aged 65 or over)	1,297 (85.9%)	1,227 (84.7%)
2. Chronic sick and tuberculous	56 (3.7%)	118 (8.1%)
3. Maternity	56 (3.7%)	38 (2.6%)
4. Mentally disordered	7 (0.5%)	3 (0.2%)
5. Others	93 (6.2%)	64 (4.4%)
TOTAL ...	1,509 (100%)	1,450 (100%)

The number of elderly persons being assisted continued to show an increase, and 70 more patients in this category received help compared with 1963. The provision of domestic assistance in connection with home confinements increased by 18.

During the financial year ended March 31st 1964 the cost of the service per 1,000 population was £165, the cost per case being £42. These compare with national average figures of £231 and £37 respectively.

4. Visits

The County Home Help Organiser and her assistants made a total of 4,205 home visits during the year, 902 more than in 1963, and the provision of home help service was arranged for 289 new cases. Personal visits are invaluable both in observing the actual work of the home helps and in ensuring that the needs of individual patients are being adequately met.

5. Training

The fourth annual training course for home helps was held at County Hall in March. Invitations were sent to 60 home helps employed in the southern and western areas but, probably owing to travelling difficulties, only 22 actually attended. Any lack of numbers was, however, compensated by the enthusiasm of those who came.

Instruction at this course followed closely the programme used at the previous meetings held in Wellingborough (1960), Kettering (1961), and Corby (1962). Demonstrations in home nursing and the use of hoists, lectures on problem families, and on how a home help can assist in rehabilitation following mental illness, were among the subjects covered. On the last afternoon, a film strip entitled " The Home Help " was followed by a lively discussion period during which questions were answered by a panel of senior staff. This helped to resolve some of the problems home helps encounter in their daily work.

In September, the County Organiser and one of the assistants attended the annual week-end school arranged by the Institute of Home Help Organisers. The programme included lectures and discussion on the rehabilitation of problem families; prevention of accidents in the home; learning to live with a handicap ; and keeping the ageing mind active. The Deputy County Medical Officer spoke on mental illness.

6. Mobile home help

A part-time mobile home help was appointed in the closing months of the year. At present, she is employed in Thrapston and the fringe area of Kettering, but will ultimately cover more of the Oundle and Thrapston rural area. The employment of a further three or four workers in this category throughout the county is desirable in order to provide help in isolated areas and in places where it is difficult to recruit home helps. The availability of mobile assistance will also be invaluable in emergencies.

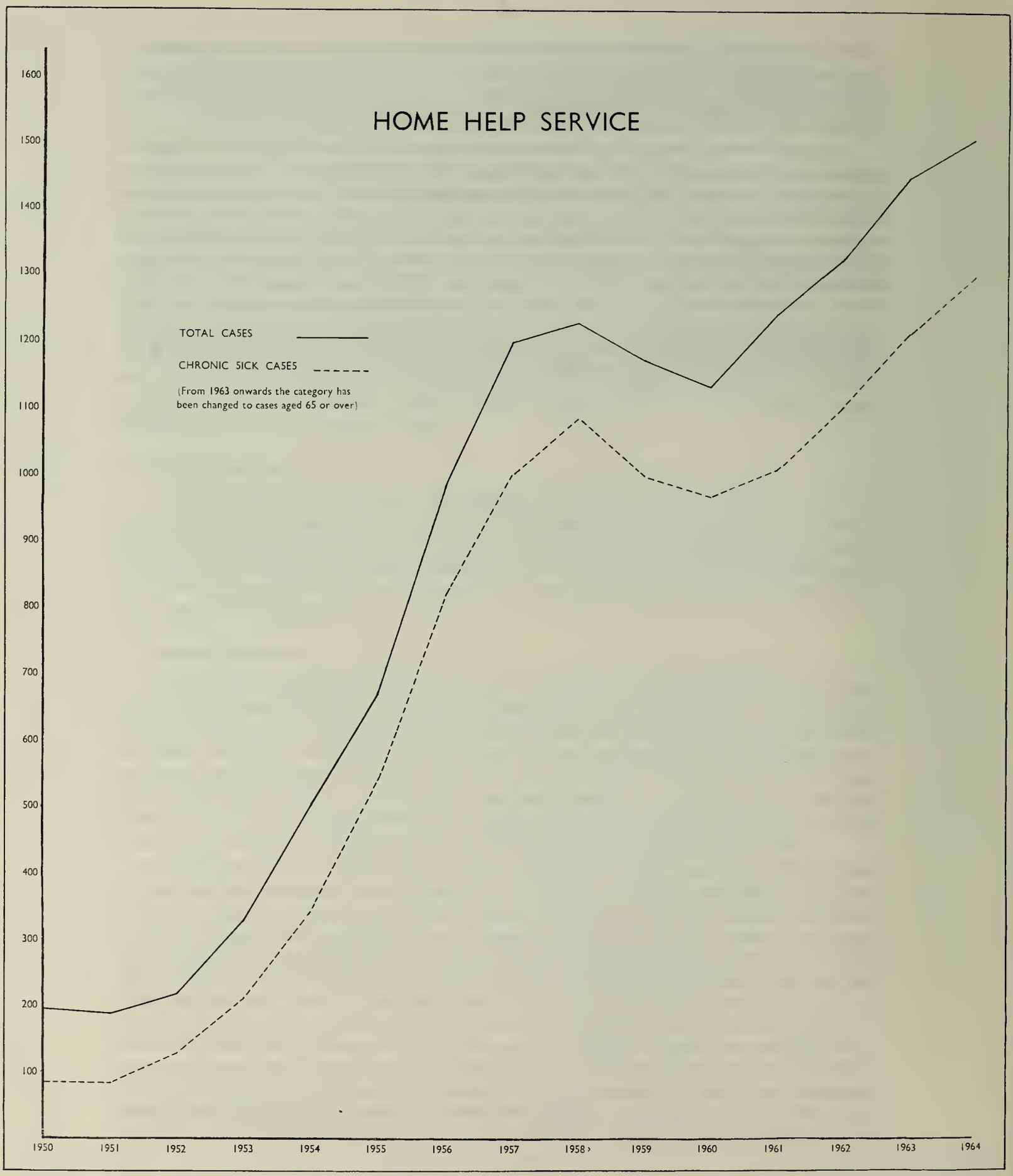
7. General observations

Home helps are employed on a casual basis and their numbers therefore fluctuate throughout the year but, at any given time, approximately 800 are in employment. In the more populous areas, many work more or less permanently, and are available to go from case to case. In general, there is no shortage of home helps and, in the more remote parts, such difficulties as arise are usually only temporary. In the past, there has been particular difficulty in obtaining the services of home helps in the Rushden area but, thanks to a close liaison with the local Ministry of Labour office, recruitment has improved and, at the end of the year, 31 home helps were being employed in Rushden compared with 25 at the corresponding time in 1963.

The consideration that home helps show towards their patients, and their many personal acts of kindness, have been written about in previous reports, and 1964 continued this tradition. The work of the home help covers a wide range of duties amongst patients with varying needs. Foremost, there is the chronically sick and frequently incontinent patient for whom no hospital bed is immediately available but who can, with suitable assistance, be cared for at home under the supervision of the family doctor and with the assistance of the district nurse. In such cases the home help has virtually to assume both the care of the patient and the running of the home. Another important group comprises elderly patients who are discharged from hospital and who are, indeed, anxious to go home but who live alone and require substantial home help services to cover their period of rehabilitation. There are also the chronic sick, and usually elderly, patients mostly living alone, who are transported to hospital as day patients. In such cases a home help may be necessary to cook breakfast, to assist with washing and dressing, and to prepare the patient for the arrival of the ambulance. The home help must then make the bed, do the

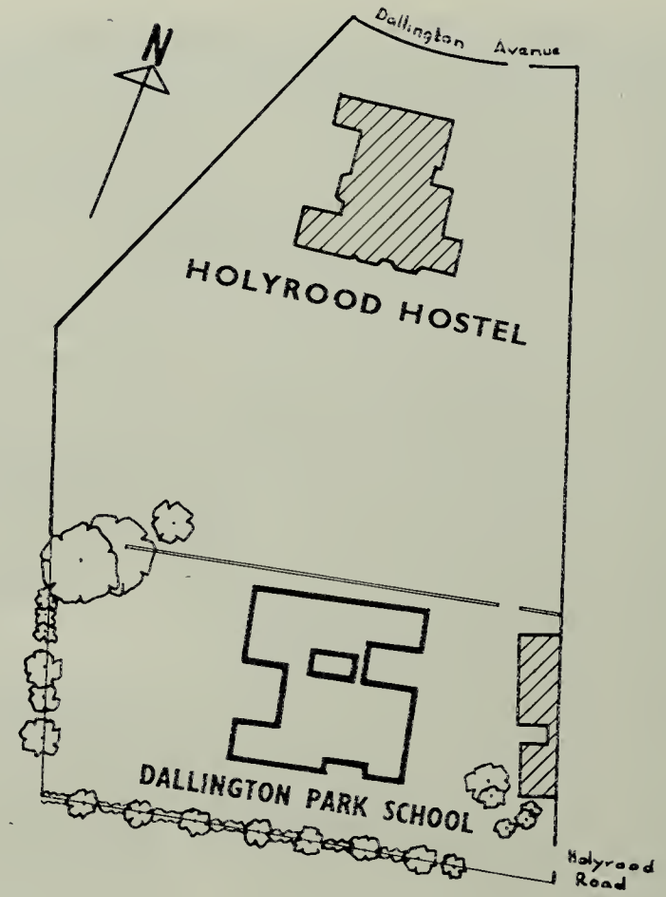
cleaning and shopping, and prepare a fire for the return of the patient in the evening. Finally, there are the problem families where the home help is supplied at the request of a health visitor or by arrangement with the Children's Department. In such cases the help is acting partly as a teacher, and contributes towards the solution of what is usually a long-term problem.

In view of the emphasis on the personal assistance aspect of the home help service, it might in some ways be more appropriate to re-name it the " Home Care Service ". The contribution of the service to human happiness, particularly amongst the elderly, is outstanding, and the resistance on the part of some of these old people to accepting the home help is slowly diminishing, no doubt in recognition of the fact that the security which the home help service offers has become more widely known, as most old people must now have either a friend, a neighbour, or a relative who has had personal experience of the service. With the ageing population, with the current and growing emphasis on domiciliary care in a variety of medical conditions, and with the implementation of policies of earlier hospital discharge, there is no doubt that the work of the home help service will have to expand steadily for many years to come if it is to continue to meet the very real needs of the most vulnerable groups of the county's population.


HOME HELP SERVICE
TOTAL CASES
CHRONIC SICK CASES
(From 1963 onwards the category has been changed to cases aged 65 or over)
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964

HOME SAFETY COMPETITION—AN AREA FINAL AT BRAFIELD-ON-THE-GREEN

DALLINGTON PARK SCHOOL, NORTHAMPTON



FLOOR PLAN

A Classroom
B Nursery
C Assembly Hall
D Head Teachers Room
E Staff Room
F Kitchen
G Stores
H Toilets

DALLINGTON PARK SCHOOL

MENTAL HEALTH

1. Administration

(a) Committee

The membership of the Mental Health Sub-Committee remained as outlined in the report for 1962.

(b) Co-ordination with other Health Services

Here again there has been no substantial change since 1962, and a very satisfactory working relationship exists between the staff of the County Health Department, St. Crispin Hospital, Pewsey Hospital, and local family doctors.

The arrangement whereby Dr. J. de Bastarrechea, consultant in mental subnormality at Pewsey Hospital, holds regular assessment clinics in Northamptonshire, has proved most valuable, while the development of the co-ordinated social work scheme with St. Crispin Hospital has likewise brought advantages to patients, doctors and social work staff.

2. Staff

(a) Mental Welfare Officers

Mrs. A. M. Pebody, M.A., Dip. Soc. Sc., left, and Mr. J. A. Ingram, B.Sc., A.A.P.S.W., joined the staff as Senior Psychiatric Social Worker, and Mr. J. L. Edwards, Mr. J. T. W. Forward, S.R.N., R.M.N., and Mr. R. Harris, S.R.N., R.M.N., as mental welfare officers.

(b) Staff Training

Two mental welfare officers, Mr. K. Greenwood and Mr. B. F. Norman, continued on the course at the Lanchester College of Technology, Coventry, leading to the external Diploma in Social Studies of London University, and both were successful. Mr. N. J. Locke commenced the course for the same diploma in September.

Mr. D. Beale, Supervisor of the male section of the Henley Industrial Unit, Kettering, gained the Diploma for Teachers of the Mentally Handicapped, and, in the autumn, Miss V. M. Shrive, Assistant Supervisor at Henley School, Kettering, commenced the course.

3. Care of the mentally ill

During the year, Moray Lodge, Duston, was purchased for conversion into a hostel for elderly mentally disordered patients, but it is unlikely to be ready for use until 1966, when it should be able to meet a considerable need.

The figures in the following table give some indication of the work of the Department in the care of the mentally ill.

	1964	1963
1. Number of patients notified to County Health Department:		
(a) Subnormal and severely subnormal	131	110
(b) Mentally ill and psychopathic	836	840
	967	950
2 ACTION TAKEN:	**1964**	**1963**
Placed under domiciliary supervision or care	422	370
Admitted to hospital:		
(a) informally	121	104
(b) under Section 25 (observation)	201	206
(c) under Section 26 (treatment)	21	35
(d) under Section 29 (emergency)	16	11
(e) under Section 60 (Court Order)	3	7
(f) short-term care	28	24
Action pending or official action unnecessary	155	193
	967	950
3. Patients on leave from hospital	12	18
Patients discharged from hospital care	693	689
Patients discharged from supervision or care	352	321
Died or removed from area	122	153
4. Total number of admissions (including those not dealt with by the County Health Department):		
(a) for treatment	24	42
(b) for observation	219	214
(c) informally	590	618
	833	874

During 1964 the total number of cases dealt with increased by 17 and it will be seen that, with the exception of those who were admitted informally, mental welfare officers were involved in the arrangements for admission to hospital in the great majority of cases. Once again it is interesting to note that only the small number of sixteen patients had to be admitted through the emergency procedure under Section 29 of the Mental Health Act, 1959. This is in contrast to certain other parts of the country, where extensive reliance appears to have been placed on this procedure.

4. Joint social work scheme with St. Crispin Hospital

In November 1963, a co-ordinated social work scheme between St. Crispin Hospital and Northamptonshire County Council came into being and details of this were published in the report for that year. With the appointment of a Senior Psychiatric Social Worker, and the increased tempo of providing professional training for the staff, the joint scheme is now well under way and its benefits are already becoming clear to all concerned.

5. Care of the mentally subnormal

(a) Cases

A total of 131 patients were referred to the County Health Department and, of these, 92 were accepted for supervision.

Fifty-three names were removed from the list of those under care, 34 because they no longer required supervision, three because of death, and 16 on account of having left the area. The total number receiving help was approximately 550, and these were visited by mental welfare officers where particular difficulties had to be solved, and in other cases by health visitors, who paid a total of 984 calls.

(b) Hospital care

Thirty-seven patients were admitted to psychiatric hospitals for the subnormal, 34 entering informally, and 3 by order of a court. Twenty-eight of these patients were admitted for temporary periods, usually in order to provide a break for their parents.

At the end of the year the waiting list for admission to hospital was as follows:

	Males		*Females*		*Total*
	Under 16	*Over* 16	*Under* 16	*Over* 16	
Urgent ...	2	1	1	3	7
Non-urgent ...	5	2	4	3	14
Totals : ...	7	3	5	6	21

The total is the same as in 1963 and is comparatively small, reflecting the advantage derived from the comprehensive provision of community care, coupled with the flexible use of hospital facilities to provide temporary relief, and the availability, at Kettering, of a hostel for subnormal men.

(c) Voluntary bodies

Once again the centres received generous help from the local branches of the National Society for Mentally Handicapped Children, as well as from other sources.

(d) Training centres

The total number attending training centres at the end of the year was 252, an increase of 24 compared with 1963. Those under the age of 16 increased from 154 to 173, whilst trainees over that age increased from 74 to 79, with 58 of the latter attending the Henley Industrial Unit at Kettering.

Numbers attending Training Centres

		Under 16	*Over* 16	*Total*
Henley Industrial Unit, Kettering	Males	—	34	34
	Females	—	24	24
		—	58	58
Henley School, Kettering	Males	22	—	22
	Females	18	—	18
		40	—	40
Wellingborough Junior Training Centre :	Males	31	—	31
	Females	12	4	16
		43	4	47
Forest Gate School, Corby	Males	22	1	23
	Females	19	5	24
		41	6	47
Dallington Park School, Northampton	Males	29	2	31
	Females	13	6	19
		42	8	50
Banbury Training Centre :	Males	5	2	7
	Females	1	1	2
		6	3	9
Rugby Training Centre :	Female	1	—	1
Total under training :		173	79	252

The year's work at all centres was satisfactory, despite the inadequacy of the accommodation at Wellingborough, where negotiations for the purchase of a site were completed. The new junior training centres at Corby and Northampton, namely Forest Gate School and Dallington Park School respectively, were opened in the autumn. Each consists of four classrooms with ancillary premises and they were, in fact, designed as mirror images of each other. The schools were opened by Lord Balniel, M.P., Chairman of the National Association for Mental Health, on November 7th, and the excellence of the facilities provided has been repeatedly remarked upon by parents and by visitors.

(e) Henley Hostel

The Henley hostel provides residential accommodation, mostly from Mondays to Fridays, for 15 mentally subnormal men who live in areas of the county from which they would be unable to travel daily to Kettering. The majority attend the Henley Industrial Unit, but some are capable of going out to work and of earning their living.

Residents who are not working receive allowances from National Assistance or National Insurance sources, out of which they are given 8/6 pocket money, whilst 5/- is saved, the remainder of the money being used to pay for their accommodation and maintenance. Residents who are in employment are on a sliding scale, depending upon their income, and some

have been able to earn as much as an average of £13 per week. The benefits both to the men, and to the economy, of having facilities which permit at least some of the hostel's residents to earn a living are obvious and, at the end of the year, three were in regular employment.

The admissions and discharges during the year were as follows.

In residence 31.12.63	*Admitted during* 1964	*Discharged during* 1964	*In residence* 31.12.64
7	8	4	11

Staffing the hostel was at first difficult but, by October, a suitable Deputy Warden had been appointed and it was possible to increase the number of residents. Every effort is made by the staff to run the hostel as a family unit, residents being encouraged to help as they would in their own homes, and this has resulted in a pleasant and happy atmosphere.

AMBULANCE SERVICE

(Section 27—National Health Service Act, 1946)

1. Work undertaken

The following table summarises the work of the year, and the graph (p. 57) shows the trends since the commencement of the service in 1948 :

	No. of patients carried			*Mileage*
	Accidents or emergency	*Others*	*Totals*	
County Council Service	8,723	91,707	100,430	747,551
Agency services equipped with radio-telephony	722	10,804	11,526	105,096
Other agency services	145	82	227	3,486
Supplementary services :				
Hospital Car Service... ...	2	2,902	2,904	60,840
Taxis	56	1,344	1,400	20,095
Total	9,648	106,839	116,487	937,068

Rail journeys—311 patients were conveyed by rail, involving a mileage of 20,989.

It will be seen that accidents and emergencies account for only 8.3% of all patients carried, the bulk of the work being the conveyance of persons to and from out-patient departments and clinics. The number of patients carried increased by 9,426 over the 1963 figure. The number conveyed by rail has increased, this being largely attributable to children referred to London hospitals for specialist opinion and treatment.

Tribute must again be paid to the St. John Ambulance Brigade and the British Red Cross Society who provide escorts, often at short notice, for patients travelling by rail, and to the Women's Voluntary Service for having maintained the hospital car service during the year.

One notable request was received for the conveyance of a hundred-year-old woman from Danetre Hospital, Daventry, to the Isle of Wight. She had suffered from a fractured femur, but on discharge was able to walk with assistance. A Red Cross escort travelled with her and an ambulance and train journey was arranged in the usual way. Seats were booked on suitable trains and on the ferry, and the patient was conveyed by ambulance at both ends of the journey and across London.

2. Vehicles

The establishment was increased by four, by providing two additional vehicles for the Kettering station, one for Wellingborough, and retaining one vehicle due for replacement within the reserve fleet.

There is now a total of 35 vehicles, of which 22 are conventional 2/4 stretcher ambulances, 8 are ten-seater/1 stretcher dual-purpose vehicles, and 5 are ambulance conversions of the Austin A.60 Countryman.

3. Staff

The establishment of driver/attendants was increased by eight, providing two extra at Corby and one at Brackley, Kettering, Northampton, Rushden, Towcester and Wellingborough. The total number of staff employed at the end of the year was sixty-nine.

4. Agency services

The agency arrangements with the Rothwell Motor Ambulance Committee were terminated on March 31st at the request of the local committee which was experiencing difficulty in providing staff during normal working hours.

The main agency services at Daventry and Islip were fully committed every day. The work of the smaller agencies at Desborough, Irthlingborough and Raunds, who rely on staffing by volunteers, continues to decrease, the bulk of the journeys on these areas being undertaken by the neighbouring full-time stations of the County Council.

5. Establishment

The establishment and distribution of staff and vehicles is as follows :

(a) **Headquarters**
County Ambulance Officer
Deputy County Ambulance Officer
2 Control Officers
3 Assistant Controllers
1 Telephonist/Clerk

(b) **County Council service**

STATION	VEHICLES	STAFF			
		Station Officer	*Leading Drivers*	*Drivers*	*Total*
Brackley ...	2	—	1	3	4
Corby	5	1	1	8	10
Kettering ...	7	1	1	11	13
Northampton ...	5	1	1	10	12
Oundle	2	—	—	2	2
Rushden ...	3	—	1	4	5
Towcester ...	3	1	—	5	6
Wellingborough	5	1	1	7	9
Reserves ...	3	—	—	—	—
	35	5	6	50	61

(c) **Agency services** (equipped with radio-telephony)

Station	*Vehicles*	*Staff*
Daventry ...	3	4 full-time drivers and volunteers
Islip	1	Part-time and volunteers
	4	

(d) **Agency services** (not equipped with radio-telephony)

Station	*Vehicles*	*Staff*
Desborough ...	1	Volunteers
Irthlingborough	1	Volunteers
Raunds	1	Volunteers
	3	

These services are supplemented by the Hospital Car Service of the Women's Voluntary Service and by the hiring of taxis in the Brackley and Daventry areas.

6. Annual competition

An inter-station competition was again held at Wellingborough, the winning team this year coming from the Northampton station. In the regional competition, organised by the National Association of Ambulance Officers and held at Kidlington, Oxfordshire, the Northampton team was placed second out of six entries.

7. Control room

The work of the control staff must inevitably increase with the growing demands on the service and, to ease the burden on the staff during the peak periods, an automatic telephone answering machine was installed. Hospitals and doctors were asked to telephone non-urgent calls to this machine, so that their messages could be transcribed at the convenience of the control staff during the slacker periods of the day. The advantages include saving of time for doctors making calls in that it is not necessary to speak at dictation speed ; relieving doctors of the need to write out transport certificates for individual patients ; economy in the printing of transport certificates ; and saving in postage.

8. Training of staff

The county's first preliminary training course for ambulance staff was attended by twelve members, drawn from the various stations. Lecturers, including surgeons from local hospitals, a physiotherapist, and members of the county medical staff, gave talks on various aspects of the work of the ambulance service. The practical programme was under the supervision of the senior ambulance staff, and the week's course was concluded with written and practical examinations. Such training will, it is hoped, become a regular feature of the county ambulance service.

9. Disciplinary code and standing orders

At the request of the National Union of Public Employees, standing orders, including a disciplinary code for the ambulance service, were prepared and subsequently agreed by the union and by the Ambulance Sub-Committee, with effect from January 1st, 1965.


AMBULANCE SERVICE
Mileage
900,000
800,000
700,000
600,000
500,000
Patients Carried
100,000
80,000
60,000
40,000
20,000
1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964
15.2 13.4 13.0 11.7 11.2 10.0 9.0 8.6 8.1 7.8 8.1 8.1 8.0 8.0
AVERAGE MILES PER PATIENT

INFECTIOUS DISEASES

1. Notifications

The diseases notified during the year, with the corresponding figures for 1963, are given below. Further details are given on page 59.

	1964	1963
Dysentery	44	177
Encephalitis, acute, post-infectious ...	2	—
Erysipelas	11	12
Food poisoning	65	19
Hepatitis, infective	32	74
Malaria	3	—
Measles	3,501	4,183
Meningococcal infection	5	5
Paratyphoid fever	2	4
Pneumonia, acute	70	101
Puerperal pyrexia	18	37
Scarlet fever	73	115
Tuberculosis—respiratory	86	69
—meningeal	1	14
—other	19	
Whooping cough	251	274

Comments : The three malarial infections were, of course, contracted outside this country. The continuing success of immunisation was shown by the absence of any cases of diphtheria for the eighth successive year, and by a similar absence of poliomyelitis for the third year in succession.

2. Vaccination and immunisation

(a) General

Vaccination against smallpox, poliomyelitis, diphtheria, whooping cough and tetanus continue to be offered to members of all eligible age groups at County Council clinics and through family doctors. Triple antigen, protecting simultaneously against diphtheria, whooping cough and tetanus, is most commonly used, although single antigens or any combination can be supplied on request. B.C.G. is offered to all children at 13 years of age and a report of this is given in Part II, page 14.

In October 1963 the Ministry of Health asked local authorities to review their immunisation arrangements in order to raise the levels of protection as high as possible, and the opportunity was taken of making a reappraisal of arrangements in Northamptonshire.

A folder, " Protection Against Infectious Diseases," was produced and is now given to each mother when the health visitor makes her first or second visit to the new baby. The folder, which is in two colours, explains the possible effects of various diseases, how the immunising procedures are carried out, and when the child should be protected. In addition to this, parents are now advised by post when their children are due for a booster at 15 months and a further

CASES OF INFECTIOUS DISEASES

(Final numbers after correction.)

DISEASES	URBAN DISTRICTS														RURAL DISTRICTS									Totals for Administrative County
	Brackley (Borough)	Daventry (Borough)	Higham Ferrers (Boro')	Kettering (Borough)	Burton Latimer	Corby	Desborough	Irthlingborough	Oundle	Raunds	Rothwell	Rushden	Wellingborough	Totals for Combined Urban Districts	Brackley	Brixworth	Daventry	Kettering	Northampton	Oundle and Thrapston	Towcester	Wellingborough	Totals for Combined Rural Districts	
Anthrax	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery...	1	1	—	35	—	—	—	—	—	—	—	—	2	39	1	—	1	1	1	1	—	—	5	44
Encephalitis: acute, infective ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis: acute, post-infectious	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	1	2
Erysipelas...	—	—	2	—	—	—	—	—	—	—	—	1	4	7	1	1	—	—	1	—	—	1	4	11
Food poisoning	—	1	—	39	1	1	—	—	1	—	—	—	5	48	7	1	5	1	2	—	—	1	17	65
Hepatitis, infective ...	—	—	—	4	—	11	1	—	—	—	—	—	10	26	1	2	1	—	—	—	2	—	6	32
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	3	3
Measles	91	5	1	721	158	771	209	23	9	20	273	29	98	2408	163	136	76	180	211	175	108	44	1093	3501
Meningococcal infection ...	—	—	—	2	—	1	—	—	—	—	1	—	1	5	—	—	—	—	—	—	—	—	—	5
Ophthalmia neonatorum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paratyphoid fever ...	—	—	—	1	—	—	—	—	—	—	—	1	—	2	—	—	—	—	—	—	—	—	—	2
Pneumonia, acute ...	1	1	3	11	5	4	—	—	—	—	—	—	23	48	—	5	—	—	5	3	7	2	22	70
Poliomyelitis: acute, paralytic ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis: acute, non-paralytic ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal pyrexia ...	—	—	—	12	—	—	—	—	—	—	—	—	3	15	—	1	—	1	—	—	—	1	3	18
Scarlet fever	1	—	—	8	—	7	1	—	—	—	3	3	11	34	3	9	6	3	9	—	1	8	39	73
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis, respiratory	—	2	2	13	—	34	—	1	—	—	1	2	8	63	2	1	5	2	2	6	1	4	23	86
Tuberculosis, meningeal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	1
Tuberculosis, other ...	—	—	1	3	—	2	—	—	—	—	—	3	1	10	1	—	—	2	—	3	3	—	9	19
Typhoid fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping cough ...	1	—	—	43	5	29	—	—	—	5	7	4	48	142	3	2	16	7	28	20	23	10	109	251
Totals	95	10	9	893	169	860	211	24	10	25	285	43	214	2848	182	162	111	197	259	208	145	71	1335	4183

appointment for boosters against diphtheria, tetanus and poliomyelitis, is sent six months before children are due to start school.

During October, a publicity campaign was launched in conjunction with the Central Office of Information, in local papers circulating throughout the county and details of all the clinics at which children could receive the various forms of immunisation were published. Letters were also written to the editors giving them details of the immunisation state within the county and asking them to give any further publicity they could, concurrently with the official advertisements. Most of the editors co-operated and gave further space to the subject of immunisation, and one even sent a reporter to a local child welfare centre and subsequently published a special article on the need for vaccination and immunisation.

These special efforts appear to have had a beneficial effect on the immunisation statistics for the county, with the exception of those for vaccination against smallpox, to which special circumstances apply. Further comments on protection against individual diseases will be found later in the chapter.

(b) Immunisation by health visitors

From time to time approaches have been made by family doctors desiring the services of health visitors to carry out immunisations, usually in cases where parents have failed to bring their children back to the surgeries in order to complete courses of protection. The giving of immunising injections by nurses has tended to be looked upon with considerable conservatism nationally, and emphasis has usually been laid on the possibility of difficulties arising, for example, on account of breakage of needles, infection resulting from injections, or the possibility of recipients of immunising injections proving to be hypersensitive to the vaccine. On the other hand, it should be remembered that nurses, both in hospital and in domiciliary work, give a wide variety of therapeutic injections on the instructions of medical practitioners, and these carry risks of broken needles, of infection and, in some cases, of reactions as great as those associated with injections for the purposes of immunisation.

After legal advice had been obtained, and the Council's insurers had confirmed that existing policies would cover any claim arising from the giving of immunising injections by health visitors, the Health Committee agreed that they should be permitted to inoculate against poliomyelitis, diphtheria, whooping cough and tetanus. It is not intended that the routine work of immunisation should be taken over by health visitors but, if a family doctor or medical officer should require the assistance of a health visitor in carrying out immunisations in particular patients, she should be permitted to give it, just as a nurse gives a penicillin or other therapeutic injection on receipt of similar medical instructions. Arrangements were made for health visitors to have refresher courses on immunising injections and it is hoped that, in the special types of cases which will be referred to them, it will be possible to achieve immunisation where this has not been successfully completed by a doctor.

(c) Triple immunisation

A total of 5,354 children received a full primary course, and boosters were administered in 6,431 cases. These figures show a great improvement on the previous year, when numbers were 3,767 and 3,213 respectively, and are clearly attributable to the publicity campaign and revised arrangements for reminding parents about the importance of immunisation.

The table on page 61 shows the number of children born at any time since January 1st 1950 who, by January 31st 1964 had completed a course of immunisation against diphtheria.

Age on 31/12/1964 (*i.e., born in year*)	*Under* 1 1964	1-4 1960-1963	5-9 1955-1959	10-14 1950-1954	*Under* 15 *Total*
Number immunised	2,019	15,770	17,871	15,676	51,336
Estimated mid-year child population ...	5,770	21,530	46,800		74,100
Estimated percentage immunised ...	65%		71%		69%

The overall figure is 2% better than in 1963 and almost seven out of every ten children under 15 years of age have been immunised against diphtheria. In the pre-school (under 5 years) age group, the increase is 3%, and in school children (5-14 years), the increase is 1%.

(d) SMALLPOX VACCINATION

During the latter part of 1963 it was decided that no useful purpose was served by continuing to keep smallpox records for persons over the age of 15 years. The Ministry of Health was therefore requested to approve an appropriate amendment of the County's existing proposals under section 26 of the National Health Service Act, 1946. Formal approval was received by the County Council on March 16th, 1964, and the modified proposals came into effect from April 1st.

The following table shows the number of persons who were vaccinated during 1964.

	Primary	*Revaccination*
Under 1 year	435	—
1 year	1,667	—
2 years	197	27
5 years	100	103
15 years + ...	227	300
Totals ...	2,626	430
Grand Total ...	3,056	

Comments. The number of primary vaccinations increased by 746 compared with 1963, although there were 272 fewer revaccinations. The grand total was up by 474. As was explained in the Annual Report for 1962, the Standing Medical Advisory Committee advised the Minister of Health that routine vaccination against smallpox should preferably be carried out during the second year of life, and this led to a substantial drop in vaccinations the following year. By 1964, an improvement had taken place, and the total number of infants vaccinated below the age of two years was 2,102 which, although better than in 1963, was substantially below the 3,180 children under one year of age who were vaccinated in 1962. Thus, although there has been some improvement in 1964 compared with 1963, there is little doubt that the new policy whereby children are vaccinated during the second year of life instead of in their early months, is having a deleterious effect on the total numbers who are being vaccinated. On the other hand, the figures for 1962 were undoubtedly inflated by the fact that smallpox occurred in England during that year, so the present figures are little worse than a reversion to the levels which applied during the 1950's. It is hoped that, with the passage of time and the development of greater public understanding, vaccination in the second year of life will come to be more acceptable to parents, with a consequent rise in the percentage of children protected.

(e) Poliomyelitis vaccination

During the year 5,238 children under 15 years of age received primary courses of vaccination against poliomyelitis and 4,189 had boosters. In addition, 294 persons over 15 years of age received primary courses and 134 had booster courses. The following table shows the number of children born since 1st January 1950 who, by 31st December 1964, had completed a course of vaccination against poliomyelitis.

Age on 31/12/64 (*i.e., born in year*)	*Under* 1 1964	1-4 1960-63	5-9 1955-59	10-14 1950-54	1-15 *Total*
Number immunised	780	14,453	21,518	20,172	56,143
Estimated mid-year child population ...	5,770	21,530	46,800		68,330
Estimated percentage immunised ...		67%	89%		82%

In addition, 69,109 persons over 15 years of age have received primary courses.

From the table it will be seen that only 780 children born during 1964 had completed primary courses of vaccination against poliomyelitis. This is because only those born in the first few months of the year could have done so and, to prevent misunderstanding, estimates of the percentage of children vaccinated have been made only in respect of those between the ages of 1 and 15 (i.e., those born between 1st January 1950 and 31st December 1963).

(f) Tetanus vaccination

Triple antigen has now been in use in Northamptonshire since February 1960, so virtually all pre-school children who have been immunised against diphtheria and whooping cough are also protected against tetanus.

The scheme outlined in the annual report for 1963 whereby the County Health Department has assisted the Casualty Department of Kettering General Hospital in following up patients who had failed to return to the hospital for a second injection, has continued throughout the year. A total of 2,458 persons received a second injection against tetanus at the hospital, and health visitors were asked to visit a further 816 who failed to attend for the second injection. In addition, 1,625 persons who had been immunised under the scheme during 1963 were sent reminders to attend the hospital or their own family doctors for a third injection.

(g) Yellow fever vaccination

A weekly clinic is held at Northampton for people who require yellow fever vaccination prior to going overseas, and 599 vaccinations were performed. Of these, 248 were civilians and the remaining 351 were military personnel. A charge is made for this service.

3. Tuberculosis

(a) Incidence and mortality

At the end of the year 1,041 cases of respiratory tuberculosis and 336 cases of non-respiratory tuberculosis remained on the registers. There were 86 primary notifications of respiratory and 20 of non-respiratory disease. Thirty new cases were transferred from other areas. Six notifications were posthumous. The table on page 59 shows the number of cases notified in each county district.

Deaths from respiratory tuberculosis numbered 13, and from non-respiratory disease, three.

There were thus 16 deaths from all forms of tuberculosis, compared with 12 in 1963. The mortality rate was 5.1 per 100,000, the rate for the combined urban districts being 4.7 and for the combined rural districts 5.7.

The annual tuberculosis mortality rates from 1912 are shown in graph form on page 69.

(b) Mass radiography

Mobile Units of the No. 1 Mass Radiography Service of the Oxford Regional Hospital Board visit various centres in the county, once or twice a week, for the purpose of X-raying patients referred by general practitioners, in addition to which they carry out special surveys. During the year, a total of 30,127 persons was X-rayed and 34 cases of active pulmonary tuberculosis were found. This gives a rate of 1.13 cases of active pulmonary tuberculosis per 1,000 examinations.

(c) B.C.G. vaccination of schoolchildren

This subject is dealt with in Part II (page 14).

(d) Extra nourishment grants

Grants of free milk were made to eight patients, most of whom lived in areas not covered by voluntary care committees. These grants are given on the recommendation of the chest physician without regard to the family income.

(e) reports of chest physicians

(1) The following comments are based on the annual report on the chest service of the Kettering Hospital Management Committee area, prepared by Dr. O. E. Fisher, consultant chest physician.

Introduction

The Chest Department under review consists of Rushden Hospital and associated Clinics, and serves a population of 206,080 in the north eastern half of the County of Northampton. The headquarters are at Rushden Hospital which has 71 beds for the treatment of tuberculosis and non-tuberculous chest patients, and which also serves as the base for the administration of the clinic services.

Out-patient organisation

Out-patient clinics are established as follows :

St. Mary's Hospital, Kettering
Rock Street, Wellingborough
Nuffield Diagnostic Centre, Corby
Rushden Hospital

New patients are referred to the clinics by general practitioners without prior appointment, so that there is no waiting period for out-patient appointments. This does mean that occasionally when exceptionally large numbers of patients attend a clinic, some patients have to wait longer in the clinic than if they were only seen by appointment. General practitioners are unanimous in their opinion that the ease by which they can get their cases seen promptly is to the benefit of their patients, and outweighs any inconvenience caused by occasional delays in the actual clinic. However, increasing numbers of new cases are not now referred directly by general practitioners, but are sent by the two general practitioner mobile referral units. Follow-up cases receive an appointment for the next visit before leaving the clinic.

Rushden Hospital

Despite the reorganisation of the chest service three years ago, hospital admissions continue to rise, and there were 319 admissions in 1964, an increase of 53 on the previous year. In the past ten years admissions have increased from 176 to 319, whilst the proportion of tuberculosis admissions has declined from 88% to 23%.

Tuberculosis

There were 72 tuberculosis admissions compared with 62 in 1963, of which 60 were respiratory and 12 were non-respiratory.

Bronchial carcinoma

There was a large increase in lung cancer admissions, 71 new cases compared with 49 in 1963. In all, 82 new cases of bronchial carcinoma were investigated by the department during the year, of which 72 were males and 10 were females. Of these 82 patients it is known that at least 50 are already dead. Fourteen had resections and four of these patients have died. It is probable, therefore, that less than 10% of these unfortunate victims will be alive in three years' time.

Chronic bronchitis

There was a welcome reduction in admissions from chronic bronchitis, 45 compared with 64 in 1963. This was probably due to the absence of any major respiratory epidemic in 1964.

Chest Clinic statistics

Total attendances	4,509
New cases (excluding contacts)	1,460
Active respiratory tuberculosis, new cases	60
Active non-respiratory tuberculosis, new cases	13
Inactive respiratory tuberculosis, new cases	376
Active respiratory tuberculosis relapses	8
Contacts examined for first time	403
Contacts diagnosed as suffering from respiratory tuberculosis	9
Contacts diagnosed as suffering from non-respiratory tuberculosis	*Nil*
Classification of 69 respiratory tuberculosis cases (new) :	
(a) Tubercle bacilli not isolated	32
(b) Tubercle bacilli isolated	37
Number marked off clinic register as recovered (respiratory and non-respiratory)	83
Total number of cases on tuberculosis clinic register at 31/12/64	482
Number of cases of positive sputum during the year, excluding new cases	17

There has been a slight reversal in the downward trend of tuberculosis notifications which had been steadily falling since 1954. Last year there were 82 new cases of tuberculosis (69 respiratory and 13 non-respiratory) added to the chest clinics' register compared with 71 (57 respiratory and 14 non-respiratory) in 1963. This increase in numbers of respiratory cases is probably chiefly due to the fact that a Mass Radiography Survey picked up 15 cases in Corby. Corby is a rapidly expanding new town whose population is increasing by about 2,000 annually, and most of the adult population has migrated from areas where the incidence of tuberculosis is substantially higher than in Northamptonshire. The population of Corby is approximately one-fifth of the population served by the chest services, but out of the total number of 82 new cases of all forms of tuberculosis notified in the area in 1964, 36 came from Corby. This is more than double the incidence from the rest of Northamptonshire. In order to determine whether this increased prevalence in Corby was due to the arrival of large numbers of newcomers with

active disease, all patients notified in Corby in 1964 were asked how long they had lived in the town and their place of origin. It was found that, apart from child contacts, 80% of the patients had migrated from areas in the British Isles (chiefly Clydeside) where the incidence of tuberculosis is substantially higher than in Northamptonshire. There was, however, no evidence that newcomers to Corby (less than three years' residence) had any higher incidence of tuberculosis than old residents, as most of the patients had lived in Corby for many years, and only two had lived in Corby for less than three years.

New cases of tuberculosis diagnosed in chest clinics

	Respiratory Tuberculosis	*Non-Respiratory Tuberculosis*	*Total*
1954	150	3	153
1955	101	15	116
1956	95	13	108
1957	118	12	130
1958	102	16	118
1959	75	16	91
1960	78	22	100
1961	51	15	66
1962	63	8	71
1963	57	14	71
1964	69	13	82

Deaths

Deaths from tuberculosis have now reached such a low figure that they no longer serve as a significant index of the amount of tuberculosis in the community. During the year the names of 13 patients (all respiratory) were removed from the clinic register on account of death (all causes). Examining these deaths more closely it was found that the causes of death were as follows :

Cardio-vascular disease	2
Cor pulmonale	2
Cor pulmonale and M. kansasii infection	1
Cancer of bronchus	1
Leukæmia	1
Senility	2
Coronary thrombosis and pulmonary tuberculosis ...	1
Pulmonary tuberculosis	2
Pulmonary and glandular tuberculosis	1

Thus out of a population of over 200,000 the number of deaths amongst notified cases in which active tuberculosis was still present reached the low figure of 4, and it is known that three of these cases had drug resistant infections.

Contact examination and B.C.G. vaccinations

All known contacts are asked to attend chest clinics or the 100 m.m. mobile X-ray unit for chest X-ray and for tuberculin testing in persons under the age of 35 years. Tuberculin negative reactors are given B.C.G. vaccination. Statistics for the past seven years are as follows :

Year	Contacts Examined	B.C.G. Vaccinations	Respiratory Tuberculosis Total	Respiratory Tuberculosis Contacts only	Non-Respiratory Tuberculosis Total	Non-Respiratory Tuberculosis Contacts only	Cases on Register at end of Year
1958	851	411	102	8	16	Nil	905
1959	773	396	75	4	16	1	867
1960	722	477	78	3	22	1	833
1961	709	507	51	4	15	1	704
1962	580	355	63	12	8	Nil	662
1963	537	395	57	4	14	Nil	498
1964	403	330	69	9	13	Nil	482

In addition, the following factory and school contacts were examined by the Mobile X-ray Unit :

	Number examined	Respiratory tuberculosis
Factory contacts	1663	3
School contacts	198	Nil

Non-tuberculous chest diseases

The following table lists non-tuberculous diseases diagnosed amongst new cases attending the chest clinic during 1964 :

Cancer of bronchus	84
Other malignant diseases	8
Simple tumours and cysts	4
Chronic bronchitis and emphysema, including cor pulmonale	149
Acute respiratory infections, including pneumonia ...	166
Asthma	35
Spontaneous pneumothorax	9
Non-tuberculous effusions, including empyema ...	6
Bronchiectasis	37
Sarcoidosis	9
Aspergillosis	4
Pneumoconiosis	4
Haemoptysis (unexplained)	16
Congenital heart disease	5
Acquired heart disease	40
Miscellaneous	136
No abnormality detected	649

Mass radiography

Prior to April 1964 the No. 1 (Northants) Mass Radiography Unit operated two 100 mm. units, one to carry out routine community surveys, whilst the second unit carried out a weekly programme examining general practitioner referrals, and X-raying special groups such as factory contacts and positive tuberculin reactors in school children. The yield of significant tuberculosis by the conventional Mass Radiography Unit had become so low (the pick up rate in 1963 was .41 per 1,000) that as from April 1st this unit was also converted to general practitioner mobile referral work. The two units now visit 17 sites weekly, two visits being made to Corby. Because of the higher incidence of tuberculosis in Corby, the last and only community survey during the year was carried out here. The table below gives the number of persons X-rayed and the number of cases of tuberculosis so far discovered and confirmed by the two types of unit.

	Community Surveys	*G.P.* Referrals and *Special Groups*
Persons X-rayed	16,152*	13,975
Referred to Chest Clinics	86	341
Diagnosed active respiratory tuberculosis	15	17
Not yet diagnosed	—	40
Active respiratory tuberculosis rate per 1,000 ...	0.93	1.22

* *Corby only.*

(2) The following comments are based on notes supplied by Dr. N. O'Leary on her work in the south-western part of the county, with a population of about 103,000.

Chest clinics

Clinics are held at St. Matthew's Parade, Northampton, Danetre Hospital, Daventry and Creaton Hospital.

Chest clinic statistics

Total attendances	1,942
New cases other than contacts	494
New contacts	144

The waiting list for appointments is short at any of these clinics and it is very exceptional for anyone to wait longer than a week. Numbers of new attendances fell quite a lot in the latter half of the year as the G.P. referral service of the Mass Radiography Unit began to visit Daventry, Towcester and Long Buckby. This has been a great help as it eliminated nearly all the " X-ray to exclude " type of case, and most of the new referrals had some sort of lung pathology.

Tuberculosis

Number of notified cases of pulmonary tuberculosis on clinic registers ...	202
Number of notified cases of non-pulmonary tuberculosis on clinic registers ...	12
B.C.G. vaccinations	94

4. Venereal disease

Clinics for the diagnosis and treatment of venereal diseases are held as follows :

Kettering General Hospital

Females	Tuesday	5.30-6.30 p.m.
Males	Tuesday	6.30-7.30 p.m.

Northampton General Hospital

Females	Monday	5.00-6.30 p.m.
	Friday	2.00-4.00 p.m.
Males	Wednesday	2.00-3.00 p.m.
	Friday	5.00-6.30 p.m.

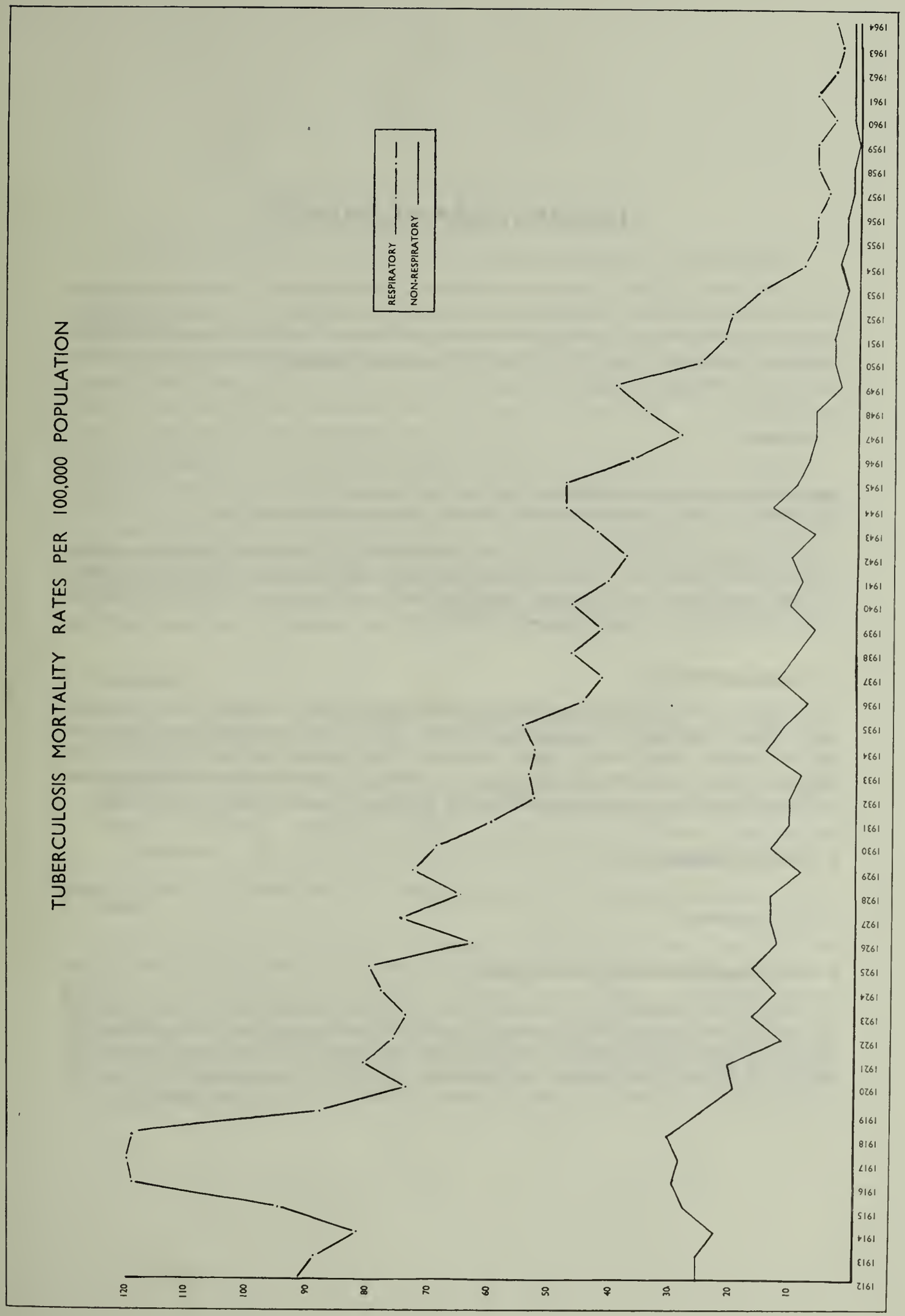
Peterborough Memorial Hospital

Females	Tuesday	10.00-12 noon
	Thursday	4.30-6.30 p.m.
Males	Monday	4.30-6.00 p.m.
	Wednesday	5.30-7.00 p.m.

The numbers of county patients attending for the first time were :

	Syphilis	*Gonorrhoea*	*Other Conditions*
Kettering General Hospital	10	22	48
Northampton General Hospital	2	18	72
Peterborough Memorial Hospital	—	3	12
Total	12	43	132

These figures are somewhat higher than were those for 1963 when a total of 112 new cases attended clinics.


TUBERCULOSIS MORTALITY RATES PER 100,000 POPULATION
RESPIRATORY
NON-RESPIRATORY
120
110
100
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LIAISON ARRANGEMENTS

In the report for 1963 a chapter was devoted to a consideration of liaison arrangements between the County Health Department on the one hand, and hospitals, general practitioners, voluntary organisations and other departments of the County Council on the other. It is not proposed to repeat this section in the current report, beyond drawing attention to several developments which took place during 1964.

1. Hospitals

Reference to the increasingly close linkage between members of the County Health Department staff and general and psychiatric hospitals will be found in the sections dealing with midwifery, home nursing, and mental health, as well as elsewhere in this report.

Initial steps were taken towards the joint appointment of a consultant geriatrician, whose services will be shared by the Regional Hospital Board and the County Health Department. It is anticipated that this appointment should be filled in 1965, and an account of the arrangements will be given in the annual report for that year.

2. General practitioners

Reference to the increasing availability to general practitioners of Health Department staff will be found in the chapter dealing with midwifery. In addition, plans were made during the year for the direct attachment of health visitors to certain general practices, with effect from 1st January 1965, and, by the end of the year, a new loose-leaf booklet dealing with health services in Northamptonshire was nearing completion, for distribution to general practitioners in 1965.

3. Voluntary organisations

Here again, existing contacts have been maintained and, particularly in the field of mental health, strengthened.

4. Other departments of the County Council

The joint sub-committee of the County Health and Welfare Committees, to which reference was made in the report for 1963, continued its work and, amongst the subjects reviewed, were the future requirements of sheltered workshops ; the availability of certain records between the Health and Welfare Departments ; the organising of domiciliary occupational therapy ; and nursing advice for the staff of old people's homes registered with the Welfare Committee.

RESEARCH, PUBLICATIONS, AND POSTGRADUATE AND OTHER VISITORS

1. Research

In the report for 1962, reference was made to a study being carried out by Dr. N. H. Kamel, a postgraduate student at the London School of Hygiene and Tropical Medicine, into certain aspects of child welfare work in several areas of England, including Corby. The results of this research, including various interesting facts concerning the work of the local health authority in that town, were published as a Ph.D. thesis in 1964.

As was reported in the chapter dealing with midwifery, a study of social and medical factors involved in the domiciliary and hospital care of uncomplicated maternity cases was commenced in October in co-operation with the staff of the Barratt Maternity Home, and it is hoped that preliminary results will be available in 1965. As was also mentioned under health visiting, a study of diabetic children was likewise undertaken during the year. Finally, the second study of public attitudes in connection with the Northamptonshire Mental Health Project was completed and, once again, preliminary results should be available in 1965.

2. Publications

Dixon, E.E. (1964). " Girls growing up." Health Visitor, 37, 346.

Forester, J. A. (1964). " Health education in a new idiom." Nursing Mirror, 119, 3102, 245.

Gatherer, A. (1964). " An approach to home safety education." Medical Officer, 112, 277.

Reid, J. J. A. (1964). " Future of public health." British Medical Journal, 2, 1483.

Reid, J. J. A. (1964). " Diabetes mellitus. Certain aspects of prevention, detection and treatment." World Health Organisation Fellowship Report. Project 62R/UK-13.

3. Visitors

Under the usual scheme, two doctors, this time from Fiji and Sierra Leone, studying for the postgraduate Diploma in Public Health at the London School of Hygiene and Tropical Medicine, visited the Department for a period of observation of field work in March. An arrangement has also been made whereby medical undergraduates from St. Thomas' Hospital Medical School spend a similar period studying the work of the County Health Department. The customary wide range of other visitors was welcomed, and included doctors, nurses, and others interested in public health work from the West Indies, Sweden, Kenya, Thailand, Denmark, Australia, and the United Arab Republic.

ENVIRONMENTAL HYGIENE

1. Water Supply and Sewage Disposal

(a) Approval in principle

The following scheme was submitted to the County Council in accordance with the provisions of the Rural Water Supplies and Sewerage Acts, 1944-1951, and was approved in principle.

Authority	*Scheme*	*Estimated Cost*
Brackley R.D.C.	Kings Sutton—Improvement of main drainage system	£53,300

(b) Contributions made

The County Council agreed to make the following contributions in accordance with the approved scale.

Authority	*Scheme*	*Estimated Cost*	*Ministry of Housing and Local Government Grant*	*County Council's Contribution (Capital Sum)*
Brackley R.D.C.	Aston-le-Walls sewerage	£27,630	Half-yearly payment of £186 for 30 years	£5,300
	Main drainage of Sulgrave—Stage 2	£29,710	Half-yearly payment of £242 for 30 years	£6,900
	Thorpe Mandeville main drainage	£24,380	Half-yearly payment of £125 for 30 years	£3,550
Daventry R.D.C.	Norton sewerage	£22,100	Half-yearly payment of £129 for 30 years	£3,670
Kettering R.D.C.	Harrington sewerage	£33,600	Half-yearly payment of £207 for 30 years	£5,880
Oundle and Thrapston R.D.C.	Great and Little Addington sewerage	£38,000	Half-yearly payment of £304 for 30 years	£8,650
Towcester R.D.C.	Gayton sewerage	£50,887	Half-yearly payment of £592 for 30 years	£16,830
	Lichborough sewerage and sewage disposal	£31,700	Half-yearly payment of £345 for 30 years	£9,425
	Pattishall and Cold Higham sewerage	£120,674	Half-yearly payment of £967 for 30 years	£27,500

(c) Revised contributions

The County Council revised its contributions in the light of revisions made by the Ministry of Housing and Local Government, as follows :

Authority	*Scheme*	*Estimated Cost*		*Ministry of Housing and Local Government Grant*		*County Council's Contribution*	
		Original	*Revised*	*Original*	*Revised*	*Original*	*Revised*
Brackley R.D.C.	Syresham sewerage and sewage disposal	£38,831	£35,225	Half yearly payment of £650 for 30 years	Half-yearly payment of £610 for 30 years	£13,125 (capital sum)	£12,330 (capital sum)

Authority	*Scheme*	*Estimated Cost*		*Ministry of Housing and Local Government Grant*		*County Council's Contribution*	
		Original	*Revised*	*Original*	*Revised*	*Original*	*Revised*
Brixworth R.D.C.	Chapel Brampton and Boughton crossing sewerage	£33,600	£31,787	Half-yearly payment of £450 for 30 years	Half-yearly payment of £435 for 30 years	£11,200 (capital sum)	£10,600 (capital sum)
	Church Brampton and Harlestone sewerage	£62,900	£56,476	Half-yearly payment of £645 for 30 years	Half-yearly payment of £615 for 30 years	£20,967 (capital sum)	£18,825 (capital sum)
Kettering R.D.C.	Cranford Road sewerage and sewage disposal	£11,350	£10,732	Half-yearly payment of £85 for 30 years	Half-yearly payment of £80 for 30 years	£2,300 (capital sum)	£2,156 (capital sum)
Northampton R.D.C.	Sewer extension, Northampton Road, Denton	£1,296	£1,346	£335	£304	£335 (capital sum)	£304 (capital sum)
	Hackleton sewerage phase II	£36,000	£33,493	Half-yearly payment of £280 for 30 years	Half-yearly payment of £265 for 30 years	£7,960 (capital sum)	£7,570 (capital sum)
	Little Billing sewerage	£5,200	£5,049	£1,190	£1,055	£1,190 (capital sum)	£1,055 (capital sum)
		(a contribution of £1,000 will be made by A. J. Mackaness, Ltd., towards the cost)					
Oundle and Thrapston R.D.C.	Benefield and Brigstock water supply	£16,000	£13,755	£6,500 (capital sum)	£3,250 (capital sum and half-yearly payment of £67 for 30 years	Annual payment of £308/8/6 for 30 years	Annual payment of £265 for 30 years
Wellingborough R.D.C.	Ecton sewerage	£19,000	£22,462	£2,000	Half-yearly payment of £88 for 30 years	£2,000 (capital sum)	£2,800 (capital sum)

(d) Outstanding schemes

Towards the end of the year, information was obtained from the rural authorities in the county about their outstanding sewerage and sewage disposal schemes so that some idea could be obtained of the possible extent of the future financial commitments of the County Council.

The district councils were asked to supply lists of the remaining schemes which had still to be prepared and submitted by them and also of schemes which had been submitted and approved in principal by the Health Committee but which had not been started. The total estimated cost of the schemes is as follows :

	£
Schemes submitted to, and approved in principle by, the Health Committee but not yet begun	532,986
Schemes still to be prepared and submitted for approval	1,548,925
	£2,081,911

2. Rural Housing

The activities of rural housing authorities during 1964 are summarised in this table which also indicates their achievements in the entire post-war period.

	Population Est. 1964	*Under construction at* 31/12/64*	*Completed up to* 31/12/63	*Completed during* 1964*	*Total post-war houses completed at* 31/12/64	*Post-war houses completed per* 1,000 *population*
Brackley	12,120	12 (26)	737	26 (27)	763	63.0
Brixworth	18,920	— (—)	696	— (—)	696	36.8
Daventry	17,050	22 (12)	1,009	18 (6)	1,027	60.2
Kettering	11,770	3 (33)	838	36 (10)	874	74.3
Northampton ...	30,770	43 (46)	1,771	43 (32)	1,814	59.0
Oundle and Thrapston	18,450	39 (21)	833	19 (13)	852	46.2
Towcester	16,140	18 (11)	1,128	11 (17)	1,139	70.6
Wellingborough ...	13,950	21 (15)	921	15 (3)	936	67.1
	139,170	158 (164)	7,933	168 (108)	8,101	MEAN—58.2

* Figures in parentheses show corresponding statistics for 1963.

The building of 8,101 houses by rural districts, whose total population is 139,170, represents one new house for every 17.2 persons. During 1964 a total of 1,201 houses was completed by private enterprise, making a post-war total of 8,783. Combining the figures for public and private housing, a total of 16,884 houses has been completed in the rural districts of the County since the war, representing one for every 8.2 members of the population.

CAUSES OF DEATH IN ADMINISTRATIVE AREAS—URBAN DISTRICTS.

CAUSES OF DEATH	Brackley M.B.		Burton Latimer U.D.		Corby U.D.		Daventry M.B.		Desboro' U.D.		Higham Ferrers M.B.		Irthlingborough U.D.		Kettering M.B.		Oundle U.D.		Raunds U.D.		Rothwell U.D.		Rushden U.D.		Wellingborough U.D.		Aggregate of U.D'S.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ALL CAUSES	18	26	19	24	121	93	38	53	30	25	20	18	21	20	302	228	22	20	28	34	31	22	112	87	201	200	963	850
1 Tuberculosis, respiratory	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	...	1	...	...	1	3	4
2 Tuberculosis, other	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
3 Syphilitic disease	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
4 Diphtheria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 Whooping Cough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
6 Meningococcal infections	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 Acute Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8 Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9 Other infective and parasitic diseases	...	...	...	...	...	1	...	...	...	...	...	1	...	...	3	1	1	...	...	...	1	...	...	...	1	...	6	3
10 Malignant neoplasm, stomach	...	...	...	...	3	...	1	...	1	1	1	...	...	...	8	7	...	...	1	2	1	...	5	4	7	5	28	19
11 Malignant neoplasm, lung, bronchus	3	...	...	...	10	2	...	2	2	1	...	...	...	...	23	1	...	...	2	...	2	2	10	1	15	...	67	9
12 Malignant neoplasm, breast	...	1	...	...	...	4	...	4	...	1	...	1	...	1	...	8	...	...	...	...	...	1	...	1	...	9	...	31
13 Malignant neoplasm, uterus	...	1	...	1	...	4	...	1	...	1	...	...	...	...	...	3	...	...	...	...	...	...	...	1	...	4	...	16
14 Other malignant & lymphatic neoplasms	1	1	3	3	13	5	4	5	2	1	4	1	3	4	26	19	3	...	6	1	4	3	11	12	15	16	95	71
15 Leukaemia, aleukaemia	...	...	...	...	...	...	...	1	1	...	...	...	...	...	3	1	...	...	...	1	...	...	...	1	3	...	7	4
16 Diabetes	...	...	...	1	1	1	...	...	1	...	...	1	...	...	1	4	1	1	...	1	1	1	1	1	...	3	6	14
17 Vascular lesions of nervous system	3	4	2	1	5	9	4	8	3	7	1	3	4	4	39	38	2	3	4	7	3	3	9	16	19	28	98	131
18 Coronary disease, angina	2	2	5	2	23	7	7	4	8	2	5	1	4	1	64	36	3	5	5	3	6	2	32	15	39	32	203	112
19 Hypertension with heart disease	...	...	...	1	2	5	2	...	2	1	...	1	...	1	4	3	1	...	...	...	...	...	2	5	9	13	22	30
20 Other heart disease	4	9	2	4	13	10	10	16	4	6	2	5	6	4	31	37	5	4	2	7	1	4	6	8	23	37	109	151
21 Other circulatory disease	...	1	...	...	4	5	2	2	1	1	...	...	...	1	13	14	...	1	...	...	1	1	6	5	9	9	36	40
22 Influenza	1	...	2	1	...	1	2	4	...	...	...	...	...	...	...	2	...	...	...	...	...	...	1	...	...	1	6	9
23 Pneumonia	...	2	...	1	5	7	1	4	1	...	1	...	...	...	14	4	3	1	...	2	...	...	2	1	9	7	36	29
24 Bronchitis	2	...	2	...	16	2	1	...	1	...	1	...	1	...	33	7	...	1	1	...	6	...	5	1	24	2	93	13
25 Other diseases of respiratory system	...	2	...	...	1	1	...	...	...	...	...	...	...	...	...	3	1	1	...	...	...	...	...	...	1	...	3	7
26 Ulcer of stomach and duodenum	1	...	...	...	2	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	1	...	1	...	7	...
27 Gastritis, enteritis and diarrhoea	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	2	...	...	2	...	1	1	...	...	1	...	5	5
28 Nephritis and nephrosis	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2	3	4	5
29 Hyperplasia of prostate	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	1	...	...	...	...	...	2	...	1	...	6	...
30 Pregnancy, childbirth, abortion	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
31 Congenital malformations	...	...	...	1	1	5	...	...	1	1	...	...	...	...	3	2	...	...	...	1	...	1	...	...	2	3	7	14
32 Other defined and ill-defined diseases	...	3	1	6	10	13	3	2	...	1	2	1	1	2	18	22	...	1	2	5	2	1	8	6	14	20	61	83
33 Motor vehicle accidents	1	...	...	...	5	2	...	...	...	...	2	2	...	...	6	1	1	...	...	...	1	...	2	...	2	1	20	6
34 All other accidents	...	...	...	1	3	5	1	...	...	1	1	1	...	1	7	4	...	2	2	3	1	2	3	6	3	6	21	32
35 Suicide	...	...	1	...	...	3	...	...	1	...	...	...	2	...	2	4	...	...	...	...	...	...	5	2	1	...	12	9
36 Homicide and operations of war	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Live Births — Total	37	25	38	40	589	541	53	48	39	27	36	23	41	44	356	348	31	22	33	32	38	26	191	128	299	303	1781	1607
Live Births — Legitimate	35	24	36	38	566	509	51	48	38	27	35	21	40	43	327	325	30	22	33	30	36	25	182	119	277	277	1686	1508
Live Births — Illegitimate	2	1	2	2	23	32	2	...	1	...	1	2	1	1	29	23	1	...	...	2	2	1	9	9	22	26	95	99
Still Births — Total	...	...	...	...	9	10	1	2	2	...	1	1	1	...	4	3	...	...	...	...	...	1	1	6	4	6	23	29
Still Births — Legitimate	...	...	...	...	9	10	1	2	2	...	1	1	1	...	4	3	...	...	...	...	...	1	1	5	4	6	23	28
Still Births — Illegitimate	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Deaths of Infants under 1 year of age — Total	...	...	...	...	9	17	...	1	1	1	...	...	...	...	9	7	1	...	...	1	1	...	6	...	6	8	33	35
Deaths of Infants under 1 year of age — Legitimate	...	...	...	...	9	16	...	1	1	1	...	...	...	...	8	6	1	...	...	1	1	...	5	...	6	8	31	33
Deaths of Infants under 1 year of age — Illegitimate	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	1	...	...	...	2	2
Deaths of Infants under 4 weeks of age — Total	...	...	...	...	6	11	...	1	...	1	...	...	...	...	8	5	...	...	...	1	...	...	5	...	5	6	24	25
Deaths of Infants under 4 weeks of age — Legitimate	...	...	...	...	6	10	...	1	...	1	...	...	...	...	7	5	...	...	...	1	...	...	4	...	5	6	22	24
Deaths of Infants under 4 weeks of age — Illegitimate	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	2	1
Deaths of Infants under 1 week of age — Total	...	...	...	...	6	11	...	1	...	1	...	...	...	...	7	5	...	...	...	...	...	...	4	...	4	6	21	24
Deaths of Infants under 1 week of age — Legitimate	...	...	...	...	6	10	...	1	...	1	...	...	...	...	6	5	...	...	...	...	...	...	3	...	4	6	19	23
Deaths of Infants under 1 week of age — Illegitimate	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	2	1
Estimated mid-year Home Population	3,630		4,430		42,770		6,130		4,530		3,900		5,160		38,840		3,450		4,680		4,750		17,490		31,910		171,670	
Comparability Factors — Births	1.11		1.13		0.83		0.91		1.29		1.20		1.03		1.10		1.31		1.20		1.24		1.08		1.05		1.02	
Comparability Factors — Deaths	0.95		1.03		2.54		0.65		0.89		1.03		1.05		0.86		0.61		0.84		0.89		0.96		0.89		1.07	

CAUSES OF DEATH IN ADMINISTRATIVE AREAS—RURAL DISTRICTS.

CAUSES OF DEATH.	Brackley R.D.		Brixworth R.D.		Daventry R.D.		Kettering R.D.		Northampton R.D.		Oundle and Thrapston R.D.		Towcester R.D.		Welling-borough R.D.		Aggregate of R.Ds.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ALL CAUSES	59	65	97	150	95	86	61	49	144	163	90	87	90	94	61	78	697	772
1 Tuberculosis, respiratory	...	...	1	1	...	1	...	...	...	1	...	...	2	...	...	...	3	3
2 Tuberculosis, other	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
3 Syphilitic disease	1	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	3	...
4 Diphtheria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 Whooping Cough	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
6 Meningococcal infections	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 Acute Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8 Measles	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9 Other infective and parasitic diseases	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...
10 Malignant neoplasm, stomach	...	...	3	2	3	2	2	...	3	3	3	2	1	1	2	1	17	11
11 Malignant neoplasm, lung, bronchus	4	1	7	2	7	...	9	...	7	1	3	...	6	4	3	...	46	8
12 Malignant neoplasm, breast	...	2	...	3	...	2	...	2	...	10	...	3	...	3	...	3	...	28
13 Malignant neoplasm, uterus	...	1	...	...	...	1	...	4	...	1	...	2	...	1	...	2	...	12
14 Other malignant & lymphatic neoplasms	7	2	9	12	8	11	6	6	16	12	8	6	9	11	7	10	70	70
15 Leukaemia, aleukaemia	...	...	...	1	1	1	1	...	1	...	...	1	...	...	...	...	3	3
16 Diabetes	...	1	...	2	...	1	...	2	...	1	1	2	2	3	...	2	3	14
17 Vascular lesions of nervous system	3	10	13	23	10	17	5	6	15	37	17	19	10	13	6	12	79	137
18 Coronary disease, angina	17	12	21	28	20	17	12	6	40	35	20	10	21	8	18	13	169	129
19 Hypertension with heart disease	1	3	2	3	1	1	1	1	2	4	...	2	...	...	1	2	8	16
20 Other heart disease	10	9	10	37	11	8	4	5	1	17	6	13	13	28	9	16	64	133
21 Other circulatory disease	1	1	3	7	4	5	2	1	7	8	2	4	3	5	1	3	23	34
22 Influenza	...	...	...	...	1	...	...	...	1	1	...	1	1	...	...	...	3	2
23 Pneumonia	3	5	4	2	3	5	...	...	9	8	5	3	4	5	2	4	30	32
24 Bronchitis	2	3	5	4	8	...	5	3	12	...	3	4	4	1	5	...	44	15
25 Other diseases of respiratory system	...	1	...	1	1	2	...	...	2	...	1	...	1	...	1	...	6	4
26 Ulcer of stomach and duodenum	1	...	1	...	...	...	...	...	2	2	2	...	...	...	...	...	6	2
27 Gastritis, enteritis and diarrhoea	2	1	...	1	...	...	1	3	1	...	1	1	1	...	...	1	6	7
28 Nephritis and nephrosis	...	...	...	...	...	...	...	...	2	...	...	...	1	1	...	...	3	1
29 Hyperplasia of prostate	1	...	1	...	2	...	4	...	1	...	4	...	1	...	...	...	14	...
30 Pregnancy, childbirth, abortion	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31 Congenital malformations	1	1	2	1	1	...	...	...	3	2	...	1	1	...	...	1	8	6
32 Other defined and ill-defined diseases	4	8	6	14	6	6	5	7	9	12	7	11	5	8	2	5	44	71
33 Motor vehicle accidents	...	1	3	1	6	1	2	...	3	1	4	...	4	1	...	...	22	5
34 All other accidents	...	1	4	3	2	3	2	1	3	6	2	1	...	1	2	3	15	19
35 Suicide	1	1	1	1	...	2	...	2	...	1	1	1	...	...	2	...	5	8
36 Homicide and operations of war	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...
Live Births — Total	130	114	164	143	152	147	93	94	342	309	164	146	151	153	128	119	1324	1225
Live Births — Legitimate	123	107	155	138	145	141	84	89	335	300	152	140	142	145	119	114	1255	1174
Live Births — Illegitimate	7	7	9	5	7	6	9	5	7	9	12	6	9	8	9	5	69	51
Still Births — Total	1	1	1	...	3	2	2	...	4	2	2	5	3	1	1	1	17	12
Still Births — Legitimate	...	1	1	...	3	2	2	...	4	2	2	4	2	...	1	1	15	10
Still Births — Illegitimate	1	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	2	2
Deaths of Infants under 1 year of age — Total	4	3	4	2	1	4	1	3	3	3	2	2	5	1	...	3	20	21
Deaths of Infants under 1 year of age — Legitimate	4	2	4	2	1	4	1	3	3	3	2	2	5	1	...	3	20	20
Deaths of Infants under 1 year of age — Illegitimate	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Deaths of Infants under 4 weeks of age — Total	4	1	3	...	1	2	1	2	3	2	...	2	4	1	...	2	16	12
Deaths of Infants under 4 weeks of age — Legitimate	4	...	3	...	1	2	1	2	3	2	...	2	4	1	...	2	16	11
Deaths of Infants under 4 weeks of age — Illegitimate	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Deaths of Infants under 1 week of age — Total	4	1	3	...	1	2	1	2	2	2	...	1	3	1	...	2	14	11
Deaths of Infants under 1 week of age — Legitimate	4	...	3	...	1	2	1	2	2	2	...	1	3	1	...	2	14	10
Deaths of Infants under 1 week of age — Illegitimate	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Estimated mid-year Home Population	12,120		18,920		17,050		11,770		30,770		18,450		16,140		13,950		139,170	
Comparability Factors — Births	1.12		1.07		1.15		1.13		0.95		1.11		1.09		1.10		1.07	
Comparability Factors — Deaths	1.05		0.79		0.94		1.02		0.86		1.03		0.96		0.96		0.96	

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON.

CAUSES OF DEATH	Sex	AGGREGATE OF URBAN DISTRICTS												AGGREGATE OF RURAL DISTRICTS										
		Total All Ages	*Under 4 weeks*	*4 wks. and Under 1 year*	1—	5—	15—	25—	35—	45—	55—	65—	75—	*Total All Ages*	*Under 4 weeks*	*4 wks. and Under 1 year*	1—	5—	15—	25—	35—	45—	55—	65—	75—
1 Tuberculosis, respiratory	M.	3	...	...	...	...	...	...	...	1	1	1	...	3	...	...	...	...	...	...	...	...	2	1	...
	F.	4	...	...	...	...	...	...	1	...	1	...	2	3	...	...	...	...	...	...	...	1	...	...	2
2 Tuberculosis, other	M.	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	F.	1	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
3 Syphilitic disease	M.	2	...	...	...	...	...	...	...	...	1	...	1	3	...	...	...	...	...	1	...	...	...	2	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4 Diphtheria	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 Whooping Cough	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
6 Meningococcal infections	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 Acute Poliomyelitis	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8 Measles	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9 Other infective and parasitic diseases	M.	6	...	4	...	...	...	...	...	1	...	...	1	1	...	...	...	...	...	...	...	...	1	...	...
	F.	3	...	1	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
10 Malignant neoplasm, stomach	M.	28	...	...	...	...	...	1	...	5	8	9	5	17	...	...	...	...	...	...	1	1	1	10	4
	F.	19	...	...	...	...	...	...	...	...	3	12	4	11	...	...	...	...	...	...	...	...	1	5	5
11 Malignant neoplasm, lung, bronchus	M.	67	...	...	...	...	...	...	1	8	24	24	10	46	...	...	...	...	...	...	2	3	22	15	4
	F.	9	...	...	...	...	...	...	...	3	4	2	...	8	...	...	...	...	...	...	...	1	3	1	3
12 Malignant neoplasm, breast	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	31	...	...	...	...	...	...	4	4	8	5	10	28	...	...	...	...	...	1	1	2	10	8	6
13 Malignant neoplasm, uterus	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	16	...	...	...	...	...	1	1	4	1	6	3	12	...	...	...	...	...	...	1	2	2	2	5
14 Other malignant and lymphatic neoplasms	M.	95	...	...	...	...	1	1	5	12	20	27	29	70	...	...	1	...	2	1	...	6	11	20	29
	F.	71	...	...	...	...	...	...	1	13	14	23	20	70	...	...	...	...	...	...	1	5	18	20	26
15 Leukaemia, aleukaemia	M.	7	...	...	...	...	...	...	...	...	3	4	...	3	...	...	...	...	...	...	...	1	2	...	...
	F.	4	...	...	...	...	...	...	...	...	1	2	1	3	...	...	...	1	...	...	...	...	...	1	1
16 Diabetes	M.	6	...	...	...	...	...	...	...	...	2	1	3	3	...	...	...	...	...	...	...	...	1	1	1
	F.	14	...	...	...	...	...	...	...	...	1	4	9	14	...	...	...	1	...	...	...	...	2	6	5
17 Vascular lesions of nervous system	M.	98	...	...	...	...	...	...	...	1	12	29	56	79	...	...	...	...	...	...	1	3	7	25	43
	F.	131	...	...	...	...	...	...	1	2	11	39	78	137	...	...	...	...	...	...	...	2	12	31	92
18 Coronary disease, angina	M.	203	...	...	...	...	...	...	4	17	53	62	67	169	...	...	...	...	...	...	4	18	30	66	51
	F.	112	...	...	...	...	...	...	...	2	17	32	61	129	...	...	...	...	...	...	...	2	13	45	69

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON.

CAUSES OF DEATH	Sex	AGGREGATE OF URBAN DISTRICTS												AGGREGATE OF RURAL DISTRICTS										
		Total All Ages	*Under 4 weeks*	*4 wks. and Under 1 year*	1—	5—	15—	25—	35—	45—	55—	65—	75—	*Total All Ages*	*Under 4 weeks*	*4 wks. and Under 1 year*	1—	5—	15—	25—	35—	45—	55—	65—	75—
19 Hypertension, with heart disease	M.	22	...	...	...	...	...	1	...	...	6	4	11	8	...	...	...	...	...	...	...	1	1	2	4
	F.	30	...	...	...	...	...	...	...	2	3	9	16	16	...	...	...	...	...	...	...	...	2	5	9
20 Other heart disease	M.	109	...	...	...	...	...	...	1	5	14	30	59	64	...	...	...	...	...	...	1	...	2	10	51
	F.	151	...	...	...	...	...	...	1	2	6	21	121	133	...	...	...	...	...	...	2	5	7	22	97
21 Other circulatory disease	M.	36	...	...	...	...	...	...	...	1	7	9	19	23	...	...	...	...	...	1	...	2	1	8	11
	F.	40	...	...	...	...	...	1	2	...	3	10	24	34	...	...	...	...	...	...	2	1	1	3	27
22 Influenza	M.	6	...	...	...	...	...	...	...	...	...	2	4	3	...	...	...	...	...	...	...	...	...	1	2
	F.	9	...	...	...	...	...	...	...	...	...	2	7	2	...	...	...	...	...	...	...	...	...	1	1
23 Pneumonia	M.	36	1	2	...	...	2	...	1	5	4	8	13	30	1	3	...	...	...	1	1	1	2	2	19
	F.	29	1	2	...	...	...	...	1	...	2	3	20	32	...	2	...	...	...	...	...	...	...	8	22
24 Bronchitis.....	M.	93	...	...	1	1	...	...	3	3	26	26	33	44	...	...	...	...	...	...	...	2	7	11	24
	F.	13	...	...	...	...	...	...	1	...	1	3	8	15	...	...	...	...	...	1	1	...	1	3	9
25 Other diseases of respiratory system.....	M.	3	...	...	...	...	...	...	...	...	...	1	2	6	...	...	...	1	...	...	1	...	2	...	2
	F.	7	...	...	...	...	...	...	...	1	...	...	6	4	...	...	...	...	...	1	...	...	...	...	3
26 Ulcer of stomach and duodenum	M.	7	...	...	...	...	...	...	...	...	2	2	3	6	...	...	...	...	...	...	...	...	1	2	3
	F.	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	1	1
27 Gastritis, enteritis and diarrhoea	M.	5	...	...	2	...	...	...	...	...	1	...	2	6	...	...	...	...	...	...	1	...	...	1	4
	F.	5	...	1	...	...	...	...	...	...	2	...	2	7	...	1	...	...	...	...	...	...	2	1	3
28 Nephritis and nephrosis	M.	4	...	...	...	...	...	...	...	3	...	...	1	3	...	...	...	...	...	...	...	...	2	1	...
	F.	5	...	...	...	...	...	...	...	...	...	1	4	1	...	...	...	...	...	...	...	...	...	1	...
29 Hyperplasia of prostate	M.	6	...	...	...	...	...	...	...	...	1	1	4	14	...	...	...	...	...	...	...	1	1	1	11
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30 Pregnancy, childbirth, abortion	M.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	F.	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31 Congenital Malformations	M.	7	4	1	...	...	...	...	1	...	1	...	...	8	5	1	...	1	...	...	...	...	...	1	...
	F.	14	6	4	1	...	...	1	...	1	...	1	...	6	2	3	...	...	...	...	...	...	1	...	...
32 Other defined and ill-defined diseases	M.	61	19	2	2	1	1	...	3	3	6	5	19	44	10	...	...	...	3	1	1	2	6	11	10
	F.	83	18	1	...	1	1	2	4	2	7	16	31	71	10	2	1	...	...	...	2	3	9	18	26
33 Motor vehicle accidents.....	M.	20	...	...	1	2	8	1	1	2	...	4	1	22	...	...	3	2	8	3	1	1	2	2	...
	F.	6	...	...	1	...	...	...	...	...	3	1	1	5	...	...	...	1	1	...	1	...	...	1	1
34 All other accidents	M.	21	...	...	...	...	1	1	...	1	6	4	8	15	...	...	...	1	1	...	...	2	3	1	7
	F.	32	...	1	1	...	1	...	1	2	...	4	22	19	...	1	...	1	...	1	...	2	1	5	8
35 Suicide	M.	12	...	...	...	...	...	1	1	4	4	2	...	5	...	...	...	...	...	...	...	1	1	2	1
	F.	9	...	...	...	...	1	...	...	1	3	2	2	8	...	...	...	...	...	1	2	1	1	1	2
36 Homicide and operations of war	M.	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
	F.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
ALL CAUSES	M.	963	24	9	6	4	13	6	21	72	202	255	351	697	16	4	4	5	14	8	14	45	108	196	283
	F.	850	25	10	4	1	3	6	19	40	91	198	453	772	12	9	1	4	1	5	13	27	86	189	425

APPENDIX

THE FUTURE OF PUBLIC HEALTH*

by J. J. A. Reid

The public health services are concerned with the prevention of disease and the provision of a wide range of domiciliary services, and in neither role can they remain static. On the preventive side the traditional subject for attack has been infectious disease, whereas in the future it is towards chronic conditions that attention must increasingly be turned. In domiciliary care, services must be adapted so as to provide more help for the elderly and for the mentally disordered in the community, while at the same time facilitating the growing tendency towards earlier discharge from hospital to planned aftercare following childbirth or illness. In all these tasks, workers in the public health field must co-operate even more closely with their colleagues in general practice and in hospital.

This need for greater co-ordination of effort is self-obvious in the case of domiciliary care, but is less widely appreciated so far as prevention is concerned. This is unfortunate because, for example, in the enormous task of trying to persuade the public to give up cigarette smoking, only the united efforts of family, hospital, and public health doctors offer any hope of success. Similarly, in the application of modern screening techniques for the secondary prevention of various diseases, it may well fall to the general practitioner to identify those likely to give the highest yield of positives ; to the public health service to teach the populace the desirability of being screened, and possibly to supply the mechanism for screening ; and to the hospital service to provide the facilities for confirmatory diagnosis.

To turn to the specific roles of the public health service in the prevention of disease, it must, in the first place, continue its traditional interest in environmental control, but at the same time public health doctors must never hesitate to hand over to others those jobs which do not require their full professional skills as well as those in which others are, indeed, more competent. There is a tendency to cling to those things which are familiar and never to ask whether some jobs might not be done at least as well by health educators, public health inspectors, architects, engineers, or others. Failure to delegate appropriate responsibility may be superficially justified by the pretext that medical knowledge is essential, but all too often it simply betokens personal insecurity.

There is also need to look critically at certain lacunae in the present preventive services. For example, in the obstetric field there remain sociomedical factors which are inadequately understood (World Health Organization, 1963) as well as the problems of abortion, prematurity, and congenital deformities. These call for epidemiological studies and, in some cases, for an approach based as much on sociology as on medicine. The recent commencement of a system of national registration of congenital deformities is a step in the right direction, as are current attempts to introduce an " at risk " approach to obstetrics and to paediatric care.

It is important to remember the directions in which the main efforts should now be concentrated. Infectious conditions have long since yielded pride of place as causes of death to cardiovascular disease and cancer ; diseases of poverty have given way to maladies of plenty ; and our increasing longevity has paved the road for chronic diseases which must either be

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prevented or promptly treated. The greatest problem of all, mental disorder, must likewise be looked upon, in its fullest extent, as a subject vitally affecting the public health.

This is no longer an era in which legislation can of itself make a notable contribution to the health of the people, but instead individuals must be persuaded of the importance of observing certain rules if they are to remain healthy, and the recently published Cohen report on health education (Ministry of Health, 1964) has shown some of the directions in which the medical profession must strive.

Whose responsibility

In the extending field of preventive medicine, and in the provision of effective domiciliary services, there is room for all who practise medicine, and there is certainly no need to make exclusive claims for any one branch. The ultimate test should be who can best do any given job. Thus many local health authorities have abandoned the holding of antenatal clinics because this can be done more effectively and with less confusion of responsibilities by general practitioners and the hospital service. Instead, such public health departments are nowadays running relaxation and mothercraft classes in which health teaching is made available to women at a time when they are particularly receptive. Similar changes must be considered in the case of child welfare clinics, for there is much to be said for these being run by family doctors, as indeed is already happening in numerous localities. However, the present manpower position in medicine makes it unlikely that a complete changeover will come about in the near future, and the profession will be faced with a dual system of child welfare facilities for some years to come.

Essentially similar remarks might be applied to the future of the school health service, in so far as the general practitioner may eventually undertake much of its routine work. He will never, on the other hand, completely replace the school medical officer, as the latter will always be required to provide specialist advice on matters appertaining to the common ground on which health and education meet. The ultimate future of school health work will lie in that direction, and in the provision, in conjunction with the teaching staff, of widely based programmes of health education. There is also need at the school-leaving stage for an effective medical link between the school health service and industry (Herford, 1957) and, it might be added, for public health participation in the development of industrial health services.

The public health service, on the other hand, has advantages over general practitioners when it comes to matters of large-scale organization, and these advantages can prove directly valuable to both parties. Thus the use of data-processing machines in the administration of immunization programmes has been successfully pioneered in West Sussex, to the mutual benefit of family doctors and the county health department (Galloway, 1960, 1963). In the all-important realm of health education the public health service again has an initial advantage. This is an important and specialised field, especially when it is remembered that the subjects which will in the future have to be put over are much more complex than those of the past. Any attempt at mental health education is less easy than is a campaign to secure a high level of acceptance of diphtheria immunisation ; and the job of persuading an apathetic public that they should not smoke cigarettes is much more difficult than that of teaching expectant mothers the importance of antenatal care.

There is nowadays a blurring of the distinct line which once appeared to separate preventive from curative medicine. Diabetes mellitus used to be regarded simply as a disease to be treated once the patient had presented himself to his doctor, often after many months of symptoms and with complications already established, whereas attention is now being turned to whether it can, at least in some, be prevented from developing into its florid state ; and cancer of the uterine cervix is being looked upon as a disease which is susceptible, if not to primary, then at least to

secondary prevention. There is, in fact, room for prevention in every branch of medicine, and the public health doctor must in the future be regarded not as the sole worker in the field of prophylaxis, but rather as a specialist whose techniques are at the disposal of others in order that all may apply the principles of prevention to their own spheres of medical practice.

Increasing integration

In achieving these new forms of prevention and in providing an adequate standard of domiciliary care, there is an agreed need for a much closer co-ordination of the three branches of the National Health Service, and public health staff can do much to facilitate this. So far as relations with family doctors are concerned it is pleasant to see the rapprochement which has typified the past decade, and it is clear that the future will see general practitioners working even more closely with many of the medical officer of health's team. The liaison which exists between general practitioners on the one hand and district nurses and midwives on the other is traditional. Similar schemes for health visitors are clearly on the way (Swift and MacDougall, 1964) and should greatly extend the quality and range of services which general practitioners can provide, the only danger being that health visitors might in the process become too isolated from the main stream of thought in their profession and thus fail to keep up with the development of new techniques in their work of health education and the prevention of illness in the family setting. What is needed is a system of attachment which does not completely sever the link with the local authority, so that they are kept in touch with their colleagues and with all relevant current trends.

Mental welfare officers and other kinds of social workers have increasingly important parts to play in community care, and here again the need is for, if not total integration, at least maximum availability so far as family doctors are concerned. Specialist health educators are likewise valuable members of the local health authority staff, and it is to be hoped that their skills and facilities will be available to practitioners who recognise the need for help.

A greater use of common premises would assist co-operation between public health and general practice, and it is a pity that health centres have failed to develop for a variety of reasons, of which finance is certainly one, although it now seems that the sharing of premises on a basis less than that contemplated for health centres is at least beginning. It is, however, by the direct attachment or ready availability of public health staff that this branch of medicine and general practice will come closest and most effectively together.

Liaison with hospitals

There is substantial scope for exchanges of staff between hospitals and local authorities on the nursing and midwifery sides, and there should also be more joint staffing schemes. Public health doctors might well undertake certain paediatric and geriatric work in hospitals, and midwives should be freely interchangeable between the two services. This latter point is of particular importance because, if district midwives were enabled to bring their patients into hospital for delivery, taking them home again several hours or a day or two after confinement, much of the present controversy about the relative merits of hospital and home confinement would be overcome. Similarly, if domiciliary nurses spent regular periods in their district general hospitals, this would pave the way for efficient schemes of earlier hospital discharge.

Health visitors can form a constructive link between hospital and community both by providing a background of relevant social information prior to a patient's admission and by supplying aftercare facilities in conjunction with general practitioners. In certain fields, such as diabetes mellitus, the load on the various health services is becoming so great that only by the

employment of specially trained health visitors to supplement the work of hospital clinics and family doctors will there be any hope of maintaining an adequate service in the future.

In the realm of psychiatry there is again scope for integration of the social work staff. There is no advantage in having hospital psychiatric social workers coming into the community in order to carry out investigations or to undertake aftercare, while at the same time the local authority's mental welfare officers are attending psychiatric hospitals in order to keep in touch with patients towards whom they have responsibilities. The logical scheme is a combined hospital and community psychiatric social work staff, with equal rights in either sphere, and with loyalties to the patients and to the doctors caring for them, no matter whether in hospital or in the community. The possibility of some similar joint scheme linking hospital almoners with the growing number of local authority social workers is also worthy of consideration.

There is particular need for an integrated hospital and community service so far as the care of the elderly is concerned, for it is in this group that nutritional and social problems are increasingly seen which, several decades ago, were the unhappy prerogative of infants in poorer homes. The hospital geriatrician should have a part-time appointment with the local authority, where he can advise the medical officer of health on the development of domiciliary services for the elderly and, in the case of the welfare services, co-ordinate the arrangements for residential care. In this connexion, as well as from the point of view of the care of the permanently handicapped, it is reassuring to note the increasing tendency towards the amalgamation of local authority and welfare departments under the overall supervision of the medical officer of health. There is much to be gained and nothing to lose by the fusion of these complementary services, as the boundary between them is artificial and stems from historical reasons rather than from present-day needs.

The ultimate step in linking the local authority and hospital services, leaving aside any possibility of the Porritt (1962) type of arrangement, might lie in the establishment in every major hospital of a department of social and preventive medicine, with a senior member of the local health authority's medical staff as consultant-in-charge. The functions of such a department would be to ensure that every patient is discharged to adequately planned aftercare ; to provide a base from which health visitors, mental welfare officers, and other local authority staff could carry out their hospital work ; to give the health educator an entry to hospital, as the scope for health education there is enormous and virtually untapped ; to provide a resettlement clinic ; to supply liaison in the control of infection in the hospital ; and, perhaps most important of all, to facilitate the mixing of hospital and local authority staff.

Medical education

Of crucial importance to the future pattern of development will be the adequacy of undergraduate medical education so far as public health and social medicine are concerned, for without a satisfactory foundation, family and hospital doctors will be quite unable to make the best possible use of domiciliary services. No medical student is shown a stethoscope for the first time only after passing his final examination, yet that is precisely what happens at some medical schools so far as the public health and social services are concerned. The basic minimum which should be included in the medical curriculum is a knowledge of how social factors may operate in the causation of disease and how they must be manipulated if treatment is to be fully effective ; the scope for prevention in all fields of medicine ; the range of local authority health and social services ; and the objects and methods of health education. The undergraduate should receive this tuition largely in the community and at the bedside—in other words, modern public health teaching must be a matter of people and not of drains and boring descriptions of administrative machinery.

It is also desirable that instruction in public health should form an integral part of all trainee assistantships, for if these facilities are to provide an adequate introduction to good general practice, trainees should understand how the local health authority can help them in their work. Co-operation can be further helped by ensuring that public health has its fair share in local postgraduate training courses ; by the production by medical officers of health of annual reports which are readable documents ; and by the issuing of efficient and regularly revised brochures of local health services.

Public Health Doctors

The medical members of the public health staff should in the future be smaller in number but more highly specialised than at present. In the past it has been regarded as an advantage for them to have had experience in the field of infectious disease ; but more emphasis should now be laid on general medicine, geriatrics, psychiatry and, if possible, on experience in general practice. The medical officer of health can no longer hope to be an expert on everything in his field of work, ranging from child health to infectious diseases, health education, mental health, ambulance services, health visiting, nursing, midwifery, epidemiology, school health, environmental control, and so forth. The future calls for fewer assistant medical officers but more senior staff with career structures which enable them to specialise in one or more of the branches of preventive and social medicine. Thus each health department should have senior medical officers with responsibilities for child health, epidemiology, and mental health and, possibly, for geriatrics, the care of the disabled in the community, and health education. This would leave the medical officer of health free to concentrate on major policies and the co-ordination of his services with the other two branches of the National Health Service and with voluntary agencies.

It is difficult to predict the most appropriate future training for medical officers of health. There is no doubt that the Diploma in Public Health provides a usefully wide background, and it may be that the most satisfactory qualification will consist of a modification of it, possibly with an increasing use of elective subjects, and certainly with more attention to such matters as sociology, social psychology, health education, and the epidemiology of non-infectious diseases. There is also need for a truly higher degree relevant to public health and social medicine, for the only present possibilities consist of a Doctorate of Medicine which, like wine, varies in quality with the place and the year, or membership of one of the Royal Colleges of Physicians, which are, understandably, concerned primarily with the field of clinical medicine. Consideration must also be given to the need for training for the higher realms of medical administration both in public health and in other fields (Brockington, 1964 ; Elder, 1964).

Without dwelling on the career prospects and remuneration of public health doctors it must be recognised that both are obviously relevant to recruitment, and if public health is to reach its full fruition in years to come, this must be adequate both in quantity and, more important, in quality. Unless this can be achieved, the present vicious circle of difficult recruitment leading to work determined by the training and ability of the staff rather than by its relevance to modern requirements will be perpetuated.

Organisation

In considering the future organisation of public health in this country the Porritt Report is mentioned only in passing, as this paper is based on the assumption that public health will remain the responsibility of local health authorities, although most of its suggestions would be equally applicable to work under area health boards. It is at first sight unfortunate having one branch of the National Health Service financed largely from a different source from the other

two, and it must frankly be accepted that, as long as public health remains a local authority responsibility, the standard of service provided will vary from one part of the country to another. On the other hand, in recent years the greater flexibility of local compared with central government finance has in many areas given the public health service an advantage over the hospitals. It must also be remembered that the considerable freedom which goes with local government allows the more progressive authorities to experiment with and to expand their health services in a way which might be less easy if they were controlled by larger regional or national bodies.

The great future need is for local health authorities of a size adequate to provide sufficiently differentiated services with, as has already been suggested, specialised staff to run the various departments, and it is doubtful if this can be achieved with a population under a quarter of a million. In a few cases there may be overwhelming geographical reasons why local authority populations should be smaller than this, but generally there is much to be said for a basic unit serving at least a quarter and preferably nearer half a million people. It is unfortunate that the current terms of reference of the Local Government Commission, while leading to some interesting proposals, are at the same time perpetuating or establishing authorities which are undesirably small from the point of view of health and, it may be suspected, of other services.

There is also urgent need to rationalise the medical administration within English counties. In county boroughs the medical officers of health have total responsibility for all health functions, but in counties the work is split between county medical officers and their colleagues in sanitary districts. Many of these districts are anachronistically small and inimical to progress in public health because of the way in which they occupy so much of the time and energy of their medical officers in attending numerous meetings, writing multiple reports, and dealing with various matters which do not call for the skills of doctors, thereby distracting them from the new and wider medical problems which are nowadays clamouring for attention. Dr. Snoddie is a splendid character, but Tannochbrae is not a suitable administrative area for modern public health purposes. These remarks are, of course, aimed solely at the present organisational framework in England and should not in any way be taken as criticism of those who must perforce work within it.

While some improvements may be brought about by the review of internal boundaries of counties which is gradually taking place, the correct answer lies in strong central county health departments, with responsibilities for local authority health functions, and with specialist medical staff available, leaving day-to-day peripheral responsibility largely in the hands of public health inspectors. This type of system works well enough in Scotland and is likely to be perpetuated in the proposed two-tier local government structure for that country. Its adoption in England would supply a much more logical and efficient service ; would be more economical in medical manpower ; would give a more straightforward and satisfying career structure; and would eliminate the present public confusion regarding the precise division of responsibilities between local health and sanitary authorities. In the case of the more populous counties there could be delegation of responsibility to medical officers of all-purpose divisions of at least 100,000 population, thus again ensuring overall control both of the environmental and of the personal health services, while maintaining a central specialised staff to whom these divisional medical officers could turn for advice on particular subjects.

Conclusion

This paper represents a brief and far from comprehensive attempt to survey some of the tasks with which the public health branch of medical practice is now faced. It has tried to emphasise that medical education, both at undergraduate and at postgraduate levels, must have much greater regard to social and preventive medicine, and that there is still enormous scope for the

development of even closer relations between hospital, public health, and family doctors. This calls for experimentation both in organisation and in the type of services provided, and it is important that, as new approaches evolve, the opportunity should be taken of carrying out concurrent operational research in order to measure their efficacy.

The reorientation of public health to meet the needs of to-day and to-morrow is already under way, but is taking place at widely varying speeds in different areas. The process would be greatly helped by the establishment of a working party containing a sufficient number of representatives from outside public health and, indeed, from outside medicine, with the task of reviewing the present age and qualification structure, as well as the recruitment, training, status, and career prospects of public health doctors. It should also consider the present organisation of public health services in order to decide whether this is in keeping with present and future requirements. This suggestion is prompted solely by the belief that public health is a vital branch of medicine and one which, with a modicum of encouragement, could contribute even more to the profession and nation in the future than it has in the past.

Summary

The public health services must continue certain of their traditional roles in prevention and in the supply of domiciliary care while, at the same time, adapting themselves to present and future needs. There is an increasingly blurred line between clinical medicine on the one hand and preventive medicine on the other. This points to the need for greater integration of the three branches of the National Health Service and for adequately comprehensive medical training at the undergraduate level. It also implies that public health staff, including health visitors, district nurses, midwives, health educators, and various kinds of social workers, must have direct personal relations both with family doctors and with hospitals. There is also a case for having a department of social and preventive medicine in every major hospital. The future field of public health work calls for changes in the training of its medical staff and in the organisational framework within which it is practised. The trend must be towards units which can offer adequate career prospects within staffs large enough to allow some degree of specialisation. Progress in all these directions might be hastened by the establishment of a working party to study the factors involved and to make recommendations.

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